Organic Food Markets in Transition





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Preface

Rapid growth in consumer demand for an industry's products frequently triggers change throughout the supply chain. The expansion creates opportunities for existing firms to grow, for new firms to enter, and for market channels to reorganize with new links between producers, brokers, manufacturers, distributors, and retailers. Fast growth also poses risks for established firms and new entrants because of volatility and uncertainty.

Market development is a process composed of many decisions by the public sector and private firms. For example, the government may specify conditions to avoid excessive market power by a few companies. Private firms may agree upon industry-wide safety standards. Sound decisions depend on high quality information, and determine the extent to which the long-term interests of society are met. We often take for granted the public information for mature product markets, such as regular price and quantity reporting. These data enable buyers, sellers and government to make well-informed choices. Such information for small markets is often incomplete or entirely missing. Under such conditions, a variety of market inefficiencies may occur.

By all accounts, the small, but fast growing, U.S. organic food market is in the midst of dramatic change that will alter the industry Yet, there is little public information to understand the nature and potential effects of this change. The lack of information may prevent researchers and policymakers from identifying problems and crafting possible solutions. Research can contribute vital intelligence on such emerging markets to shape their development in the long-term interests of private firms and consumers. This report begins to serve that role. The authors assemble existing and new data to analyze the rapidly unfolding developments in the structure and operation of the organic foods market. Their principal contribution is to identify the most critical issues confronting the industry, develop potential approaches to resolve the issues, and outline a future research agenda.

This research is a collaborative effort by researchers from the Henry A. Wallace Center for Agricultural & Environmental Policy at Winrock International and the U.S. Department of Agriculture's Economic Research Service as part of a Fund for Rural America research project entitled "Market Development for Organic Agricultural Products." This report contributes directly to the principal objective of the project - to develop and analyze information to conduct a national assessment of the market for organic products. We believe that the report provides new insights into the developing organic market by combining information from a 1998 Wallace survey, case studies and existing industry information sources.

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EXECUTIVE SUMMARY

I t is no secret that for the past several years the organic foods industry has been growing at a remarkable rate. Industry sources report that sales of organic commodities in natural foods stores approached \$3.3 billion in 1998, as compared to \$2.08 billion in 199.5. Sales of organic products in conventional supermarkets have also grown - by 576 percent in Houston, 303 percent in Baltimore, and 210 percent in Boston - between 1997 and 1998, according to the *Natural Foods Merchandiser*. Industry experts expect that current average industry growth rates of 20 to 24 percent annually will continue well into the next decade.

Such growth has led to a transformation in the organic foods industry. Firms that have been in the industry for many years not only face great pressure to expand; in some cases, they are struggling to keep up with demand for their products. They have also been confronting new competition in the form of firms that have recently entered the organic foods market. Some established firms welcome the changes: they are happy to grow and willing to tweak their production and marketing approaches to appeal to a new range of consumers. Overall, they would like to see an increase in the number of sizable organic producers, manufacturers, wholesalers and distributors. Their perspective is in marked contrast to that of others established in the business, who maintain that organic food should be grown, processed. distributed and retailed on a small, regional scale. According to them, the competition that comes with growth in the organic foods market may put small family farms at a disadvantage because it encourages large conventional corporations to enter the market, thereby decreasing opportunities for those that farm and ranch in rural areas. A major focus of this report is to determine how new and established firms are faring in this entrepreneurial climate. and whether they can expect to coexist and thrive in what is a unique and incompletely understood market.

Part of what makes the organic market unique is that the businesses and consumers it serves judge food not only by its taste, price and appearance, but also by the social and environmental benefits it represents. In this respect, it is a market that does not rely solely on economic factors in defining its products. Another difference is that, unlike the early growth of many conventional industries, the organic foods industry has grown in response to increased consumer demand, not increased supply In other respects, however, the organic foods industry is behaving much like other industries for other agricultural commodities. As the industry has grown, it has lured new firms that are now actively competing with established businesses. This growth has led to two major challenges: ensuring product integrity and ensuring efficient production and distribution of organic products. At this writing, both the industry and governments (state, federal and international) are still trying to establish a uniform definition for "organic" food an effort that has thus far met with little success. Firms are also having to combat the specter of fraud, which in this case translates to the marketing of conventionally grown products as organically grown. Meanwhile, industry firms are attempting to find more efficient ways to grow, manufacture and distribute enough organic products to meet consumer demand.

In this report, we took three approaches to examining how firms operate in the current organic foods market and how they are responding to the challenges posed by its rapid growth. First, we made a comprehensive search of the trade and academic resources available to us. Because the organic foods industry is still neglected in sources of data that economists typically use when describing industries (the Census of Manufacturers, Census of Wholesalers, Census of Retailers. Census of Agriculture and many statistical resources collected by the U.S. Department of Agriculture), we relied on a range of current literature as well as surveys

from the Organic Farming Research Foundation (OFRF) and the Organic Trade Association (OTA). Second, we used a survey from the Henry A. Wallace Institute for Alternative Agriculture, Designed for an earlier report. The Natural Foods Market: A National Survey of Strategies for *Growth*, the survey provided descriptive and statistical data on 118 organic food producers, manufacturers, distributors and retailers. Third, we completed eight case studies: two each for retailers, manufacturers, distributors and farmers in the organic foods industry. Four were relatively large, national companies in the organic foods industry; four were smaller, regional firms. They included purveyors of both fresh and processed organic products: grains, fruits and vegetables, dairy products and meats. The case studies supplied special insight into issues of intense interest to both large and small firms: standards, sourcing, distributing, cooperatives, contracting, advertising, targeting a consumer base and eco-labeling.

Although the dearth of data on the organic foods industry made it impossible for us to describe its structure and activities completely, the results of our research were revealing. We found that some large, national organic firms achieved success by emulating strategies used by mass market (that is, conventional) firms. For example, large natural foods retailers have developed their own "private labels" (house brands) and own wholesaling facilities. Large organic manufacturers contract with farmers for agricultural commodities, and large natural foods distributors use many technologically and managerially advanced Efficient Consumer Response (ECR) techniques. Large organic companies have also been innovators in areas such as contracting and cooperative development. In contrast, smaller retailers, distributors and farmers have achieved success in large part through emphasizing customer service and developing strong personal relationships with both sellers and buyers.

Based on our research, it appears that the challenges of ensuring product integrity and adequate production and distribution of organic products will be ongoing. For instance, even though mass market supermarkets are likely to continue adding organic foods to their product lines, they may have weak or non-existent screens for accepting organic products, perhaps making them more vulnerable to fraud. They may also place little value on products that meet the social and environmental sustainability aspects of organic farming, depending on whether and how their consumers want those values expressed in their organic food products. There is also the question of when the U.S. government will approve a standard definition for the term "organic" - a decision that is slated to take place in 2000, but that has engendered a wealth of controversy in the interim. With regard to meeting demand, it is possible that market imperfections may have, through a variety of factors, ranging from lack of proper distribution channels to lack of credit, prevented the marketing of as many organic commodities as consumers would like. Although market imperfections are difficult to document in this case, it is consistent with these difficulties, which create incentives for manufacturers and retailers to conclude special contracting arrangements with farmers and ranchers.

At this writing, no one can have a clear picture of exactly how the organic foods market is changing and what it will look like when the process is complete. Ultimately, however, we believe that as the organic foods industry continues to expand, new and established companies can coexist and prosper - provided that they squarely face the challenges posed by an immature distribution network and less than complete regulation. If they are successful, the organic foods industry has the potential to deliver significant market environmental and social benefits not only to its own suppliers and consumers, but also to society at large.

The Organic Food Market in Perspective

odern organic farming began developing in the early **IVI** 1920s and 1930s through the work of a few individuals. The first, Rudolf Steiner, laid the foundation of biodynamic farming, which embraces the relationship of philosophy, spirituality and the earth (Steiner, 1924). According to the Biodynamic Association, "biodynamics is a method of agriculture which seeks to actively work with the health-giving forces of nature." Steiner's composting methods have since been adopted by many organic farmers. The Demeter Association, a biodynamic certification organization, began operating in the 1930s and continues to certify farms today (Demeter Association, 1999). Sir Albert Howard and Lady Eve Balfour also contributed to early organic farming. They believed that "the soil's microbial life ...helped turn organic matter into food for crops." They began farming without chemicals and created a unique method of layered composting to develop organic matter in soil (Mergentime, 1994). The Rodale Institute, started in Pennsylvania by J. I. Rodale, was instrumental in promoting organic farming in the United States through research into building soil fertility (Klonsky and Tourte, 1998). The Rodale Institute delivered its message to the public through many Rodale periodicals, including Health Bulletin and Organic Farming.

In the early days, people bought and grew organic food for purely philosophical reasons. But in the early 1960s Rachel Carson's *Silent Spring* revealed in chilling detail some of the environmental and health consequences of intensive agriculture that relied on chemical pesticides. Demand for organic food increased, as did the number of organic farmers (Mergentime, 1994), and a genuine organic foods industry was born, Since then the industry has grown. it has encountered many of the traditional problems faced by any industry on the rise.

A key issue in today's organic foods market is simply its size. When an industry is small, the participants know one another and may also share a common ideology, making it possible to attain and uphold a consensus about rules or

quality standards. Reneging on a contract may give someone a reputation for dishonesty, and under certain circumstances, this threat keeps participants honest. As the number of participants increases, however, personal relationships are less common and the ideology of the group is likely to grow more heterogeneous. Consequently, it is difficult to reach a consensus when defining standards and ethical trading practices, or to enforce rules. And reputation, which works to preserve honesty- in a small industry, is not as effective in a large industry (Milgrom, North, and Weingast, 1990). This kind of problem often leads to institutional change, such as industry self-regulation or government intervention (North, 1990). For agricultural commodities, most kinds of institutional change are implemented to regulate the quality available in the market. Three ways to accomplish this goal are through imposing minimum quality standards (Leland, 1998), third party certification (Viscusi, 1999) and inspection (Dimitri and Lichtenberg, 1999).

An historical example serves to illustrate the point. In the early 1900s, rail transportation made it possible for agricultural commodities to be shipped over long distances. As a result, certain regions specialized in the production of certain commodities: grains were grown in the U.S. Midwest and fruit in the Pacific for sale nationwide. However, many farmers experienced severe problems as they tried to sell their products in distant markets. Disputes over quality and price, as well as failures to pay for goods, contributed to general chaos in marketing. Farmers in certain regions (for example, Pacific apple growers) were able to overcome many of these problems; others (for example, Eastern apple growers) were not. To address these problems, the U.S. Department of Agriculture (USDA) designed and administered quality standards and inspection services. It defined trading practices for commodities as well (Dimitri, 1999).

Like the early 20th century markets for agricultural commodities, today's organic foods industry is grappling with the problems of how to maintain quality during the trip from farm to market, how to describe quality and how to standardize the description of quality. How can buyers and sellers be sure that their business partners are honest and adhere to contract terms? What recourse do buyers and sellers have when partners renege on a contract?

Manufacturers (both in today's organic market and in the early 20th century) have been concerned with procuring

high quality foods and maintaining product quality during the manufacturing process. Their dilemmas are part of the universal experience of any agricultural industry: growth changes the relationships between sellers and buyers, introducing a range of new conflicts and challenges and often drastically altering institutional structure.

Perhaps the most difficult challenges for today's organic foods market are how to secure and distribute sufficient supplies of organic food and how to ensure their integrity. Ensuring integrity in turn means many things: how to market and manufacture the food while preserving its "organic" qualities, how to assure buyers that food is grown organically, knowing what type of processing is appropriate for organic foods, and being able to define exactly what "certified organic" means. A key problem has been that since the industry's inception, there has been no universally accepted definition `for "organic," making it difficult for consumers and retailers to understand what they are getting when they purchase "organic" foods. In 1973, 50 California farmers farmers addressed the issue by forming the California Certified Organic Farmers, which defined standards for organically grown food and created a certification system (Lipson, 1998). By 1980, a number of states had given authority for defining and enforcing standards to state departments of agriculture, and simultaneously, many private certifiers emerged. Currently, there are at least 44 different organic standards in the United States and at least 27 private certifiers (Fetter, 1999).

This state of affairs, in the context of rapidly growing demand. has created two distinct marketing problems. First, each certifier uses slightly different standards. For example, California farmers can register with the state after producing in a particular way for one year, while other certification systems require a three-year period. Further, although many foods can be called organically grown if pesticide residues are less than ten percent of the U.S. Environmental Protection Agency's tolerances according to some states, states such as New Hampshire require that residues be less than one percent. This variation in standards continues to make it difficult to know exactly what the term "organic" means. Second. because most organic products sell for high prices, farmers have incentives to fraudulently label their conventionally grown food as organic. In 1997, the state of Minnesota prosecuted Glacial Ridge Foods, a wholesale food processor, for selling conventionally grown beans as

organic (Mergentime, 1997). OFRF reports that several other firms were recently fined for violating the California Organic Foods Act. These kinds of problems led Congress to include the Organic Food Production Act (OFPA) in the 1990 Farm Bill. The OFPA, which defined the methods and materials allowed in organic production, established the National Organic Standards Board (NOSB), which includes food industry, consumer and environmental representatives, and the National Organic Program (NOP) within the USDA's Agricultural Marketing Service. The NOP will promulgate a proposed rule for national organic standards in 2000, although drafting such standards has already proven difficult. Myriad interested parties - including those who wrote over 200,000 comments to the USDA have spoken out regarding which practices should be permitted in organic production processes. In Europe and Japan, there are still more standards for organic foods many significantly different from those in the United States. Private and public policy battles about standards for other forms of sustainable agriculture are also ongoing throughout the country and the world on local and regional levels.

While the battles for standards rage on, the organic food industry must continue to focus on how to produce, manufacture and distribute the products that consumers want while maintaining their quality. To maintain quality, both buyers and sellers must want to do business with people who will honor agreements, which includes sending the agreed-upon product and paying the agreed-upon price. Buyers and sellers must also ensure that the product is truly organic - in a generally accepted, if not governmentally mandated, sense of the word. Further, buyers and sellers must navigate successfully within the structure of their industry, which can be defined here as the number of firms in each link along the marketing chain and their relative bargaining positions. Market structure affects both prices and quantities, and so determines whether firms on one end of the chain have market power over firms on the other. For example, there is a limited number of manufacturers of conventionally produced breakfast cereals. They sell their products to a small number of retailers, which makes it difficult for retailers to exert market power over them (Cotterill. 1999). On the other hand, there are many producers of iceberg lettuce and few retailers, making it possible for retailers to exert market power over lettuce growers during certain times of the year (Sexton and Zhang, 1996).

Regardless of whichever camp wields market power, however, farmers and manufacturers must above all produce what consumers want to buy, They can only do so by accurately transmitting this information through the industry's marketing chain: from consumers to retailers to manufacturers and finally to farmers themselves.

What Do Consumers of Organic Food look For?

Organic food consumers look for many of the same qualities that non-organic food consumers look for when they are shopping for food. Taste, appearance and freshness top their list, followed by convenience and price. However, there are certain qualities unique to organic food that consumers also deem critical. In a 1994 report commissioned by The Food Alliance in Portland, Oregon, 600 consumers, all of whom were interested in environmental issues, were surveyed about the food in which they were most interested. Here are the eight qualities that at least 50, percent of the sample rated as "extremely important":

- 1. Absence of synthetic pesticides (77%)
- 2. Absence of synthetic herbicides (77%)
- 3. Absence of e-coli or other harmful bacteria (75%)
- 4. Absence of artificial ingredients of preservatives (61%)
- 5. Absence of synthetic fertilizers (59%)
- 6. Production facilities in compliance with their environmental permits (58%)
- 7. Production facilities using only earth-sustainable techniques (57%)
- 8. Production facilities using techniques that protect water resources (56%)

Seventy-four percent of the survey respondents reported that they wanted their food to be "certified by an independent testing laboratory." A full 80 percent said that they were willing to "pay more for an eco-labeled product."

The Evolving Organic Marketplace, a Hartman and New Hope Industry Series Report published in 1997, surveyed 599 "organic interested" consumers to assess which qualities they felt were key to their purchase of organic foods. The five top criteria were (percentages indicate a rating of "extremely important" or "very important"):

- 1. Healthfulness (80%)
- 2. Availability in regular supermarkets (69%)
- 3. Environmental friendliness (67%)
- 4. Price (64%)
- 5. Convenience of preparation (53%)

Taken together, the two surveys reveal that health and environmental issues are of paramount importance to consumers interested in organic foods. Availability and convenience were also important, according to the Hartman and New Hope survey. The importance of price is less clear, given (1) that price is a key factor for respondents in one survey and not in the other, and (2) that the answers about price are based on consumer surveys, and are not conclusions drawn from an analysis of actual consumer purchasing decisions. Actual consumption data are needed to make more reliable statements about actual consumer behavior, but the required data on organic food purchases to make such assessments are unavailable.

The Marketing Chain: From Farm to Market

Food passes through many hands as it moves from farm to consumer. Some foods are fresh when delivered (apples and eggs) while others are processed before delivery (pasta and bread). Regardless of whether they are fresh or processed, higher quality products generally have a higher selling price. As a result, farmers have a strong incentive to produce and sell commodities of the highest possible quality. Yet, since most foods pass through a number of intermediaries as they move from the farm to the consumer, maintaining quality along the marketing chain is a challenge. To do so, each agent along the marketing chain must begin by moving the product to the next agent quickly, Farmers need to sell their perishable commodities immediately after harvesting, while middlemen (mainly distributors and wholesalers) need to get fresh products to retailers as quickly as possible. Retailers want to be able to purchase a consistent and large enough supply of a wide variety of uniform quality fresh food. Consumers want to be able to buy a wide variety of fresh food that is both high quality and low priced. And all consumers want to feel confident that they are buying food that not only was grown organically, but also has kept its organic integrity at each stage in its journey to the market.

Each commodity, depending in large part on whether it is fresh or processed, follows an individualized path from farm to market. Because fresh foods rapidly deteriorate, they must be delivered to the market quickly. Processed foods on the other hand, have a longer shelf life - but the products that go into them must be harvested at the right time, delivered at the right time and satisfy the processor's quality requirements. In this chapter, we will trace the marketing chain for three types of agricultural products: dairy products, fresh fruits and vegetables, and processed foods (e.g. breakfast cereals. pasta. and frozen and canned foods). Among all organically grown foods, these three product categories have the most highly developed marketing chains. Marketing chains for other products, such as organically grown meat (which could not be labeled as such until 1999), remain underdeveloped.

Marketing Dairy Products

The first step in marketing organic dairy products is simply producing the milk to make them. To produce organic milk, cows must be fed organically grown grain and hay. Organic dairy farmers may grow all of their own feed, may grow a portion and purchase some, or may purchase all the feed. Because procuring organically grown feed is difficult at times, many dairy farmers seem to produce at least a portion of the feed they use. Organic milk produced by small farms is usually sold locally. However, some farmers may resort to selling their organically grown milk in conventional markets when they have access to no other markets (Interviews: sustainable dairy farmers in Comanche Country, Texas, 1994-95). There are a few large producers of organic dairy products, including Horizon, Organic Cow and Organic Valley (a case study of which is featured in this report). In addition to bottling milk from their own cows, these companies pasteurize and 'bottle the milk of other dairy farmers, either through a marketing cooperative or through direct contracting with small and mid-sized family farms. The milk and milk products are distributed nationwide, mostly through private distribution networks (Horizon Organic and Organic Valley websites).

ORGANIC MILK MARKETING CHAIN

Organic feed \rightarrow cows \rightarrow milk \rightarrow hottler \rightarrow distributor \rightarrow retailer
Organic feed \rightarrow cows \rightarrow milk \rightarrow consumer

Marketing Fresh Fruits and Vegetables

The first stage in the fresh organic fruit and vegetable marketing chain - the production and preparation of produce for shipment - involves growers, packers and shippers working together in a number of possible combinations. In some cases, one firm grows, packs and ships the produce, while in others one firm grows and another packs and ships. After it is shipped, produce can either he sold to retailers by a broker or delivered to a terminal market, where it is sold to retailers by wholesalers. In practice, most organic produce is sold through a specialty broker rather than in a terminal market. In some instances, when a specific variety, quality or quantity is desired, larger retailers may buy fresh

fruits and vegetables directly from shippers. Organic produce can also be sold directly to consumers through farmers' markets, community supported agriculture (In a CSA arrangement, consumers purchase "shares" from a farm for a fixed price, acting as creditors and bearing production risk), and farm stands.

FRESH FRUIT AND VEGETABLE MARKETING CHAIN

 $Farm \rightarrow shipper \rightarrow wholesaler \rightarrow retailer$

 $Farm \rightarrow shipper \rightarrow retailer$

 $Farm \rightarrow consumer$ (community supported agriculture.

farmer's market)

Marketing Processed Foods

Organic processed foods include frozen vegetables, pasta, canned vegetables and sauces in jars. Specific products must be used to manufacture these foods - for example, pasta processors need to use a particular variety and grade of wheat, while frozen fruit and vegetable processors need produce that is a specific size and quality. All processors want uniform quality so they can offer products that consistently taste the same. Consequently, the biggest challenge facing organic manufacturers is how to secure a steady supply of organic ingredients of a consistent quality. The next biggest challenges are how to transport their processed goods to the supermarket and how to secure shelf space.

There are two basic marketing channels for processed foods. In the first, the farmer produces raw commodities such as grains or fresh vegetables. These commodities are then sent to the manufacturer, who converts them into a processed product, such as pasta. A distributor acts as a middleman, moving processed products from manufacturers to retailers. In the second scenario, a middleman (shipper) procures raw commodities from farmers and delivers them to manufacturers. The middleman secures the quantities needed; he or she also ensures that the commodities are high quality and meet the manufacturer's organic standards,

PROCESSED FOODS MARKETING CHAIN

Farm o manufacturer, o wholesaler o retailer Farm o shipper/procurer o manufacturer o wholesaler, o retailer

Ensuring High Quality Through Organic Certification

Consumers, retailers, manufacturers, distributors and farmers of organic food all want to be assured that food sold as organic really is organically produced. To do so, the industry currently uses a system of third-party certification (see the following box). To be certified, participating farmers must use production processes that meet the certifier's requirements. Oregon Tilth, a certifying agency in Oregon, for example, has specific requirements for ecological soil management, soil conservation and manure management, as well as lists of substances that can be added to the soil. Manufacturers, distributors and retailers involved in the natural foods market have a logical strong interest in standards as well. At least one system, California Certified Organic Food (CCOF) certifies firms that provide organic handling services, such as distributors, packers and repackers. CCOF also requires processors to use a system that ensures that non-organic products and other prohibited substances do not contaminate organic food during processing. Retailers do not have to be certified at this point, but the National Organic Standards Board recommends that all handlers, including retailers, be certified if they repackage, process or prepare any organic foods. In a new twist, some upscale restaurants have begun to work toward organic certification as well.

Creating and maintaining standards is a key marketing challenge for farmers, handlers and retailers of organic food. Farmers make a significant investment when they convert their land to "organic" acreage; as a result, they want to be sure they can sell their products as organic. To do so, they must grow food in accordance with organic standards that are generally accepted by the industry Manufacturers not only want to make sure that they start with organic ingredients; they must also be concerned about how and where they manufacture their products. Standards for

Food Labeling and Certification

Product standards deal with qualities such as a product's size, shape, color and lack of decay and blemishes. Consumers can usually see these qualities before they buy, and so labels describing them are unnecessary.

Process standards deal with qualities that cannot be seen, such as how something was produced (for example, cosmetics produced with no animal testing, dolphin-safe tuna, organically grown food). Consumers cannot see these qualities, and so a label supplies them with the information. These "green" or "eco" labels are usually backed by a third party certification process indicating that the production process satisfies an accepted set of standards. In some cases, however, labels are used even if a process has not been certified. For example, organic food labels that read "Grown in Accordance with CCOF Standards" indicate that the production process may not have been certified. In contrast, the label "Certified Organic by Oregon Tilth" indicates that the farmer grew the product in accordance with standards specified by this well-known certifier, and that his or her production process was certified as well.

manufacturers are not as widely accepted and used as those for farmers, and the concept and practice of "manufacturing" or "processing" organic food products is itself a matter of much debate. Some proponents of organic foods (Clancy, Kirschenmann) believe that there can be no "organic" processing. because the terrn "organic," as defined by the OFPA, is only a production standard. These advocates believe that organic processing must take place directly on the farm and use only additives made on the farm. They believe that "organic" food processing must be limited to minimal procedures (grinding, canning and drying are allowed. but chemical bleaching. commercial enzyme treatments and irradiation are not). Others (Kahn, Weakley, Harper) are strongly in favor of allowing synthetic materials and more complex processes to be used in organic foods processing (oil expeller presses, enzyme conversion of starch), as long as they are consistent with an organic processing philosophy.

Retailers' concerns focus on standards for the farmers and manufacturers who produce the food they sell. Retailers do not worry so much about being certified as sellers of natural foods; rather they need to be assured that all of the products on their shelves are safe, healthful and accurately labeled. Retailers know that if the products they are selling do not live up to the standards that the farmers and the manufacturers claim, the): will be the first to hear about it (from consumers) and the first to suffer the consequences.

In 1995, there were 4,856 certified organic farmers in the United States (OFRF, 1999) and 694 certified organic handlers (Dunn, 1997). (Handlers include not only manufacturers but also brokers, distributors, wholesalers and retailers.) The number of certified U.S. organic product handlers grew between 20 and 39 percent per year from 1992 to 1995. More up-to-date figures are currently being compiled. However, there are likely many more uncertified organic handlers, as most organic certification schemes do not require that handlers be certified.

GROWTH OF CERTIFIED ORGANIC HANDLERS FROM 1991-1995

Year	Number of Certified Handlers	Percent Change from Prior Year
1991	277	n/a
1992	385	39%
1993	464	21%
1994	557	20%
1995	694	25%
(Source: Julie Anton	Dunn 1997)	

(Source: Julie Anton Dunn, 1997)

The Marketing Chain Up Close: Roles, Strategies, Concerns

A lthough we have a general idea of how and through whom organic goods make their way to market, we do not have in-depth knowledge of every player in the marketing chain. Here we examine (to the extent possible) the specific roles, concerns and strategies of retailers, distributors. manufacturers and farmers alike. Although the small size of our survey sample prohibits us from making general statements about the industry, it does provide a perspective on what its members are doing, what their concerns are. and which strategies they have used to help them succeed.

Lack of information makes it difficult to discern who holds the most power in the industry Some industry analysts believe that manufacturers are the most powerful force in the food marketing channel (Kinsey, 1996), while others believe that retailers hold the bulk of the power (Cotterill, 1997). Indeed, retailers of natural foods appear to be doing exceptionally well in the current business climate. Although accurate figures for retail sales of organic food are not available, the industry trade magazine Natural Foods Merchandiser has reported significant annual sales for natural foods retailers, who are purveyors of the majority of organic products. (If at least 40 percent of a store's sales come from natural products, it qualifies as a "natural foods" store.) In 1998, 43 percent of all natural products were sold in independent natural foods stores and supermarkets, while 14.9 percent were sold in two national chains: Whole Foods and Wild Oats. In 1998, nationwide sales in natural foods retail outlets totaled \$12.34 billion (a 10 percent increase over 1997 sales) in 16,479 stores. Fifty-four percent of the \$12.34 billion was for food, 36 percent for supplements (the rest was for non-food items such as paper products). About 27 percent of natural food store sales (\$3.28 billion) involved organic products. Fresh produce accounted for the largest share of organic sales (66 percent of all sales in natural foods stores), with a value of \$708 million. Small chains or independent stores accounted for about 75 percent of nationwide sales; the remaining 25 percent were sold in Whole Foods, Wild Oats. GNC and other large chain stores. The Pacific and eastern regions accounted for the largest share of sales: each region represented 20 percent of total national sales. Mass market sales of natural foods totaled \$2.1 billion in 1998, while mass market sales of supplements totaled \$3.12 billion.

Sharing in the profits of the burgeoning organic foods industry are manufacturers, who, some analysts believe, represent the industry's fastest growing group. Sales of manufactured foods including organic ingredients totaled \$1.033 billion in 1996. according to the market overview of the *Natural Foods Merchandiser*. Among the problems specific to organic manufacturers are ensuring that ingredients procured are organic and maintaining their organic status during the manufacturing process. Manufacturers can be sure of ingredient quality by purchasing those that are certified organic. By certifying their production process, manufacturers can assure both retailers and consumers that the final product is indeed organic.

The distribution link in the organic foods industry - brokers, handlers and wholesalers - is critically important, if poorly- documented. According to the Thompson Food Industry Business List, there are about 3,000 natural foods distributors in the United States. Natural foods distributors are. unsurprisingly, more likely to sell organic food products than are mass market distributors. This said, there are many mass market distributors who have decided to integrate organic food items into their product mix.

Organic production is generally the best understood part of the organic foods market (Clancy, Kirschenmann). The most comprehensive source of information on organic farmers comes from the Organic Farming Research Foundation (OFRF) National Organic Farmer's Survey. OFRF has been following the development of organic agricultural production in the United States through biennial surveys of organic farmers and ranchers conducted in 1993, 1995 and 1997. In addition to surveying farmers about organic agricultural research and information sources, as well as organic onfarm production and management methods, OFRF has also collected marketing data. According to these data, both the number of organic farmers and acres farmed organically grew steadily throughout the 1990s (Dunn, 1995). Although they make up a very small percentage of farms in the United States, they are among a very few categories of

farms that are growing in number rather than decreasing. In 1997, according to OFRF, there were at least 4,638 certified farmers, up from 3,480 certified farmers in 1995 and 2,700 in 1933. Despite the fact that this knowledge base is good relative to those for other areas in the organic foods market, much remains unknown, in part because there is very little federal funding provided for organic production (OFRF). Further, there are many serious information gaps in our understanding of the pricing and marketing of organic food products, which have not been as carefully studied and documented as the production side.

Organic and Natural Foods Retailers

Retailers in the organic and natural foods industry behave much as their counterparts in other industries do. To make money they naturally choose the prices, quantities and product mixes that are optimal for them. Marketing strategies are important, too, since retailers' profits depend on how many people shop in their stores and how much money each person spends there. As a result, most marketing efforts are devoted to attracting new customers, maintaining existing customers and increasing sales. To meet these goals, retailers attempt to provide customers with a wide variety of high quality foods. Purveyors of natural products have functioned in this fashion since the beginning of the organic movement. However, as consumer demand for organic products increases, more and more mass market (conventional) retailers have become interested in selling organic foods (Food Marketing Institute Retailers Guide. 1997). They usually include organic foods in larger "natural" food sections, or integrate organic foods along with other foods in the "natural" category on the supermarket shelves. This trend is expected to continue. According to the Food Marketing Institute's Retailers Guide, 56 percent of mainstream retailers believed in 1994 that natural products were "very important" or "important"; a full 72 percent anticipated that natural foods would be "very important" or "important" by 1996.

BUSINESS STRATEGIES INCLUDED IN OUR SURVEY:

STRATEGIES DIRECTED TOWARD CONSUMERS

Developing a Natural Foods Label

Advertising by newspaper and direct mail

In-store advertising, demonstrations and samples

Targeting a specific market

Diversifying product selection

STRATEGIES DIRECTED TOWARD SUPPLIERS

Contracting with sellers and buyers

joining a cooperative or limited partnership

INTERNAL STRATEGIES

Hiring special staff for natural foods

Increasing scale of natural foods operations

Like their counterparts in other industries, retailers of organic foods want to have consistent supplies of products. They also need to be able to assure their customers that their organic food is truly organic. Consequently, they have made a point of establishing long-term relationships with wholesalers, who keep the retailers needs in mind when purchasing commodities. More recently, however. a significant number of mass market retailers have stopped dealing with wholesalers and are purchasing directly from organic growers or manufacturers. Most of these retailers have their own warehouses and distribution centers (McLaughlin. 1994). These retailers (more accurately called "integrated wholesaler-retailers") are part of the marketing chain for many large mass market supermarkets and many large natural foods supermarkets. For example, Whole Foods Markets, the nation's largest purveyor of natural foods, relies on the distribution centers that it owns and operates. The first of these, Texas Health Distributors, also serves as distributor for Internet sales from Wholefoods.com (soon to be Wholepeople.com). Almost all retail supermarket chains with more than 40 supermarkets and \$500 million in sales in 1996 were vertically integrated with regard to wholesaling, owning and operating wholesale distribution for their retail stores (Connor, 1997).

Retailers can increase their efficiency by sharing informa-

¹ Fifty five (out of an estimated 64) organic certification agencies shared their list of certified producers with OFRF. The members of organic farmers do not include those who were certified by the remaining 9 agencies. Also, some producers may certify with more than one agency, and so may be counted more than one time.

tion with business partners and streamlining their operations. Currently, the most popular term for informationsharing/streamlining management tools is Efficient Consumer Response (ECR), an umbrella concept that comprises four basic activities: category management. electronic data interchange. activity-based costing and continuous replenishment. ECR techniques enable retailers, wholesalers distributors and manufacturer suppliers to establish electronic links among themselves and cooperate closely to improve the efficiency of the entire food delivery system (Kinsey, 1996). ECR techniques are more widely used by mass market retailers, large manufacturers and some large producers than by smaller players in the industry

Efficient Consumer Response (ECR) techniques:

Category Management is the merchandising of product groupings based on actual consumer purchasing patterns. Retailers who use category management are using statistical evidence to create an optimal product mix, usually with the help of a manufacturer from within that category.

Activity-Based Costing involves distributing costs to specific activities performed in divisions of an organization. It is, essentially, an advanced accounting system for retailers that allows them to identify which percentage of overhead costs should be allocated to the different parts of their stores. In doing so, ABC brings a higher standard of accountability to the retailer's company overall.

Electronic Data Interchange is the transfer of data between trading partners in a standardized, paperless environment. Retailers who engage in EDI use standard electronic forms in place of paper invoice systems. These forms are transmitted over electronic mail systems or, more recently, the Internet.

Continuous Replenishment is a system of electronic custom inventory replenishment using standard formats. Continuous replenishment allows for direct close relationships with suppliers through shared computer networks. These networks allow the suppliers to view the retailer's actual stock of items at any given time. When stocks of a certain product fall to an agreed-upon level, the supplier automatically sends a new shipment.

Private Label Products

"Today just about every supermarket product is available in both store and national brands" (Mogelonsky, 1995). Private label products (also known as "house brands") bear the name of the retail outlet where they are sold (such as Safeway or Stop & Shop). Suppliers and retailers can lower costs and increase gross margins by selling private label products: in fact, they are very popular with both retailers and consumers, according to Information Resources. Inc. (IRI). IRI found that sales of private label products rose 8.3 percent in 1996 to reach \$40 billion (up from \$36.6 billion in 1995). These sales accounted for more than half of all dollar volume gains. Sales of private label products are increasing in almost all large supermarket chains: between 12 and 23.5 percent of their sales were from private label products in 1998 (Food Institute Report, selected issues).

The top private label products last year were milk, fresh bread and rolls, cheese, fresh eggs and ice cream. Private label carbonated beverages, frozen plain vegetables and sugar were also very popular (Food Institute Report, selected issues).

The CEOs of Big V, Safeway and other large supermarket chains see major growth potential in the private label portion of their sales. plan plan to expand their private label lines and increase the number of their private label products (Orgel, 1999). Kroger, a major national supermarket chain, for example, says that private label penetration is currently 25 percent of dollar sales and 30 percent of unit sales. The company sees private label sales growing faster than total sales and expects this trend to continue (Orgel, 1999).

My Organic Market: Sensible Growth and Great Customer Service

My Organic Market is a thriving organic food store in the Washington, DC, suburb of Rockville, Maryland. The store owner, Scott Nash, is a young entrepreneur whose success came from a combination of hard work, a strong business plan, a loyal customer base and sheer luck. Nash and a partner entered the organic grocery business in 1987 with Organic Foods Express, a home delivery and mail order business operating out of Nash's mother's garage. Their initial and only formal advertising effort was to distribute flyers on people's cars. After four months, Nash bought out his partner and moved Organic Foods Express to a 900-square-foot warehouse. At the time, he sold mostly high quality organic produce and bulk organic items such as nuts, flour and grains.

In 1990, Nash moved Organic Foods Express to a 2,000-square-foot warehouse in Rockville, Maryland, in order to be closer to his home delivery customers, He immediately faced stiff competition: B. Gordons, the first large natural foods supermarket in the Washington, DC, area, opened down the street from his new location. Three months later. Fresh Fields (the Washington, DC, regional name for Whole Foods) opened a store across the street from B. Gordons. During this period, a number of organic food stores closed (including, eventually, B. Gordons). and many former customers of the closed stores began frequenting Organic Foods Express. Nash faced a number of financial hurdles at this point and resorted to innovative financing methods, such as paying an employee with his motorcycle and relying on personal credit to finance his business. By 1993, Nash had phased out the mail order and delivery aspects of his business and by 1995, his sales revenues had grown to about \$17,000 a week.

While luck may have played a role in his success, Nash himself was an equally critical factor. His philosophy has been to focus on customer service - and in an industry that has been plagued by out-of-stock problems at the shipper, producer and manufacturer level, customer service has had to compensate for the fact that sometimes Nash has not always had the products his customers want. Nash knows many of his customers by name and his employees have always carried their groceries to their cars. Nash often takes the time for a quick chat and makes a consistent effort to have the highest quality produce available.

In 1996, Nash moved Organic Foods Express to a new. larger (6000-square-foot) location. The store was reborn as My Organic Market, also known by the acronym "MOM's," During the first year. MOM's had average sales of \$35,000 per week. In 1998, Nash expanded his store to its current size, 11,300 square feet, and during the past year has consis tently had sales revenues in excess of \$100.000 per week. The character of his store has changed with the market - his oldest customers, the long-time buyers of organic food. now make up the minority of his customer base, and many of his sales are made to new consumers of organic food. Fresh Fields, which was once a major threat to Nash's survival, now provides MOM's with the bulk of its new customers. Nash believes that consumers become educated about organic farming and organic foods through shopping at Fresh Fields, and soon become frustrated with the relatively small amounts of organic food available there. Word of mouth often reaches these consumers, who then shift their loyalty to MOM's,

Nash buys most of MOM's produce and grocery items through food brokers or wholesalers. and most supplements directly from their manufacturers. When buying produce, MOM's hallmark category, Nash looks for particular growers and always inspects the items personally. MOM's also supports some local farmers. The ECR techniques that are widely used in the mass market and large natural foods supermarkets are not used at MOM's. instead, information gathering, product mixes and displays result from the personal relationships of food brokers, wholesalers and MOM's buyers, Nash does no formal advertising: his business has grown on word of mouth. MOM's has a unique relationship with a local baker, Spring Mill Bakeries, which has a separate counter in the front of Nash's store, near the entrance. Spring Mill sells a wide variety of breads, muffins and cookies made with organic flour and gives customers free samples, MOM's also has in-store samples of different natural foods products and hosts an annual alternative health open house.

In today's changing organic market, Nash distinguishes his store from others by providing top quality personal cus tomer service, offering a wide variety of high quality organic produce and striving to be the best organic food store in the region. His strategies have been so successful that he is now searching for 3 location for a second store, which he plans to open sometime in 2000.

Private labels vs. Brand Names

Private labels are also known as house brands or store brands. Private label products are produced by major manufacturers and are sold by retailers under their own names. Whole Foods, for example, has two private label lines: 365 (everyday natural products) and Whole Foods (an organic product line). Private label products typically sell for a lower price than do national brands, but may instead fill a quality gap in the market. In most cases, the private label products compete directly with branded products produced by the same manufacturer.

Brand names appear on products named after the original manufacturer or supplier (General Mills or Dole in the mass market, and Pavich or Muir Glen in the natural foods industry). Consumers recognize these names and associate them with high quality products.

A few large natural foods retailers are beginning to develop private label food products, in the belief that private labels will increase profits and consumer loyalty through store brand recognition (Mergentime, 1997). This strategy has not been widely adopted. however - some natural foods retailers are concerned that developing private label products will create tension between themselves and branded natural foods manufacturers with whom they want to maintain good relationships. (Interestingly, these same manufacturers are sometimes employed by retailers to produce store brand products.)

Some industry analysts believe that natural foods retailers have an edge on mass market retailers in the private label area because consumers who shop in natural foods stores have greater trust in the store itself (Mergentime. 1997). However, because mass market retailers have more knowledge of the private labeling process, they may have an edge in developing private label foods and thus creating a market niche with high margins.

Retailers' perspectives

Conducted in 1998, *The Natural Foods Market: A National Survey of Strategies for Growth* was designed by the Henry A. Wallace Institute for Alternative Agriculture for an earlier report. The survey provided descriptive and statistical data on 118 organic food producers, manufacturers, distributors and retailers and included a variety of questions about demographics, management and operations issues, product mix, market obstacles and marketing strategies. (The entire survey can be found in Appendix B.) Although the survey was not comprehensive, and so did not represent the entire population, we gained some insight

from the responses. Of the 21 natural foods retailers surveyed (some of whom sold a mix of organic and non-organic natural products), each claimed that 80 percent of its sales were natural foods; 12 claimed 100 percent of sales were natural foods. The retailers had been in business for an average of 17 years. One had reportedly been in business for 41 years, while another had been operating for only one year. All but one of the retailers surveyed said that they had hired personnel specifically to work exclusively on natural foods products.

Efficient Consumer Response (ECR) techniques are especially important to these retailers. For them. ECR can translate directly into lower phone and fax bills, more efficient ordering and stocking, less shrinkage and many other operational benefits that translate into fewer transactions costs. To reap these benefits they must work closely with the businesses that supply them with natural foods. Two ECR techniques were particularly popular among the firms surveyed: 57 percent reported using category management and 48 percent reported using electronic data interchange. The other two ECR technologies, activity-based costing and continuous replenishment, were slightly less popular. Only 20 and 24 percent of the firms surveyed, respectively, used them.

Two of the largest challenges in marketing organic and natural foods, according to the survey respondents, are related to the in-store logistics of selling non-mass market natural foods. In fact, they are directly related to a perennially critical issue for food retailers of all types: gaining new skills and allocating staff time. In our survey, gaining new skills was perceived to be a major obstacle to success in the natural foods market for seven of 21 retailers. Allocating staff time

Whole Foods Market: Building a National "All Natural" Chain

With total sales of \$7.6 billion in 1996 and \$8.4 billion in 1997. natural food supermarkets are consistently gaining popularity and market share (Health Food Business). Although they are still the smallest supermarkets in terms of both numbers and share of overall sales (0.7 percent in each category), natural foods supermarkets are growing at a much faster rate than mass market supermarkets.

Whole Foods Market, the nation's largest natural foods supermarket, is arguably the leader in its field. Starting as one store in Austin, Texas, in 1980 the company began its current course-of rapid expansion and acquisition with the acquisition of Wellspring Grocery in 1991. It followed that acquisition with the purchase of several natural foods stores and chains cross the country including Bread & Circus in New England, Mrs. Gooch's in California and Fresh Fields in the Mid-Atlantic. By 1998, Whole Foods was operating 85 stores nationwide. Now a \$1 billion business, it plans to have 100 stores by 2000 and twice that many by 2003. in such cities as New York (Manhattan), Denver and Atlanta. The firm's growth strategy is "to open or acquire stores in metropolitan area where [it] believe[s] [it] can become a leading natural foods supermarket retailer." These areas increasingly include places that were once commonly believed unable to support a large natural foods supermarket such as Albuquerque and Denver.

Whole Foods Markets has a strong private label program. Its house brand is called "365," emphasizing the company's ability to offer natural foods at good prices every day of the year. First introduced in 1990, the private label now covers products as diverse as barbecue sauce, nut butter, vitamins, tea and tofu. Some Whole Foods Markets locations carry spring water and Jersey milk in glass bottles as well. The company now has more than 500 products, or stock keeping units, (SKUs) in 22 categories. Whole Foods also sells organic foods such as pasta under the "Whole Foods" private label. The company's private label sales are expected to generate 525 million in sales between 1998 and 2000. In the long term. Whole Foods wants 20 percent of all branded products to he sold under its own labels.

Whole Foods works with hundreds of other businesses to ensure that it has the products, services and retail environment that its customers desire, When choosing which natural foods suppliers to work with, the company tests its products to make sure they meet store quality standards for taste, nutrition and freshness. Its products generally come from its own distribution centers. The company focuses on carrying a wide selection of organic products and supporting organic and other forms of sustainable agriculture. It refrains from stocking products with artificial flavors, colors or preservatives, and sells only meat and seafood that are free of chemicals and hormones. To tailor offerings to customers' regional tastes, the company allows Whole Foods supermarkets across the country to individualize their product mix, promotions and "look." The company also participates in activities that jibe with its customers' values and beliefs: for example, it donates five percent of its after-tax profits to not-for-profit organizations. The emphasis that Whole Foods Markets places on its customers is in keeping with its philosophy that its stores are "buying agents for [their] customers, not selling agents for the manufacturers."

In March 1999, Whole Foods became an online pioneer: the first U.S. supermarket chain to launch a national online shopping service, Wholefoods.com. which sells dry goods. The company is heavily invested in understanding how it can profit from using new Internet technology properly. There is good reason to figure this out early -the "first movers advantage for internet ventures is enormous. By selling directly to consumers over the internet. the company figures that it can improve its gross margins by up to 35 percent. In 2000. the company plans to introduce a new Internet venture, Wholepeople.com. an updated version of Wholefoods.com, which will develop a high level of Internet marketing capability.

Whole Foods Markets is run using a business model based on the concept of "democratic capitalism." The concept uses self-directed teams of employees. A variety of company-sponsored programs encourage staff to be involved and active in the internal "community." that the company strives to build - even to the extent of giving teams the power to approve hires for full time jobs. The company also has a program, Team Members, that offers employees financial support for doing voluntary community service.

(i.e. directing employees' time during the working day) was rated as a major obstacle for the same number of retailers.

Finding. training and retaining good on-the-floor employees is extremely difficult for any kind of supermarket, mass market or natural foods (Food Marketing Institute, 1998). In natural foods supermarkets, however, there are additional challenges. First. the floor employees need a working knowledge of how natural foods differ from mass market foods: an understanding of how certain herbs work, for example, what the social benefits of shade grown coffee are, or why organic agriculture is good for the environment.

Thirteen of the 21 retailers (62 percent) we surveyed said that they had hired special staff specifically to work with their natural foods selection.

Supermarket retailers also rated finding sustainable and organic farmers as a major challenge. Six retailers (29 percent) in our survey rated finding reliable farmers as a major barrier. In addition, the

owners of natural foods supermarkets felt that standards for natural foods were of utmost importance. They expressed concern primarily about the current lack of strong standards for organic, eco-labeled and other natural foods, and the uncertainty about future standards for these foods. Seven of 21 (33 percent) rated the lack of government standards as a problem and nine of 21 (43 percent) rated the uncertainty about future standards as a problem. Nonetheless. retailers (as well as wholesalers, manufacturers, and farmers themselves) appear to believe that the market is functioning fairly well given its rapid growth, and that there are no large, overarching barriers impeding it.

Among the retailers surveyed, in-store advertising, demonstrations and/or samples have been used frequently All 21 retailers said that they had promoted products in-store, and of those, 16 (76 percent) claimed that they had been successful. Eighty-six percent said that they had distributed newspaper and/or direct mail advertising, with 78 percent claiming success. A smaller share, 43 percent, said that they had created a natural foods label, and all rated it as a successful business strategy

Natural retailers have also used many company-based business strategies to ensure their success in the natural foods market. All but one had diversified their natural foods offerings and 76 percent stated that they had increased the amount of natural foods on their shelves. Although growth and diversification are crucial to capturing a share of consumers' food dollars. they are far less successful if retailers are not targeting their consumer base. Accordingly, 16 of the 21 retailers we surveyed were active in targeting their clientele. For a retailer, targeting activities can begin with analyzing the best site for a store and continue with plans for spe-

> strategies designed to build good, loyal consumers for each individual store.

Some retailers are also involved in industry-based business strategies. Of the 67 percent in our survey who said that they had entered contractual relationships with other businesses, 64 percent said the effort was successful.

cial product mixes and other

Thirty-eight percent of the survey respondents said that they had joined a cooperative of limited partnerships. (In this regard, independent retailers may mean a buying cooperative or joint ownership of wholesale facilities.)

Top Challenges for Natural Foods Retailers

- Gaining new skills, training, financing, equipment and/or processes
- · Allocating staff time
- Finding appropriate agricultural producers
- Lack of current standards and uncertainty about future standards

Findings

To maximize profits, retailers must work from two sides: revenue (or demand) and cost (or supply). The case studies suggest that large-scale and smaller retailers adopt different strategies when maximizing profits. Whole Foods has adopted marketing strategies similar to those used by mass market stores, including in-store advertising, demonstrations, food samples, use of ECR techniques and doing much of its own distribution. In addition, the company has created two private labels: one for its natural line and the other for its organic merchandise. MOM's, in contrast, has focused primarily on providing personally selected, high quality organic produce and personalized customer service, although it does provide product demonstrations and samples as well. These differences are likely the result of three phenomena. First. as noted in the MOM's case study, the two stores target different clientele. Second, private labels

and ECR techniques are expensive to implement and so may be restricted to large retail and wholesale firms. Third, smaller firms rely on personal relationships. and it appears that (according to the MOM's case study) the functions performed by private labels and ECR techniques are being filled by employees, brand names, and wholesalers and food brokers.

Wholesalers, Brokers and Distributors of Organic and Natural Foods

Nearly all commodities pass through the hands of at least one intermediary on the way from farmer to retailer. For some products, this intermediate stage consists simply of packing and sorting. For others, it is a much more complex process. For example, fruits and vegetables are simply sorted by quality, packed and then sold through wholesalers, while milk products first go through a processor and then a distributor. Meats are processed and distributed; frozen foods are usually highly processed. Each kind of food presents a specific marketing challenge. For fruits and vegetables, the major challenge is to get the product to market quickly, before it deteriorates significantly. For milk products and meat, it is important to avoid bacterial contamination. In addition, all organic products must remain "organic" during processing (e.g., pasteurization and packaging) and delivery from farmer to retailer.

Natural foods distributors sit between manufacturers and retailers in the marketing chain: the); warehouse food supplied by manufacturers and deliver products to retailers. Ten years ago, these distributors were virtually all specialized, regional businesses that had served small, regional health food stores for decades, Now, changes in the natural foods business environment have made it possible for a few to claim legitimate status as national corporations. Whether large or small, however, today's natural foods distributors are operating in an increasingly competitive business environment that is, in some senses, more risky than the mass market. Many of them have to work with relatively unknown buyers who are new to the natural foods industry. These new buyers can be quite small and unfamiliar with standard pay practices (The Pucker. 1999). Other challenges faced by newcomers include learning the language sellers use when ordering and working to develop relationships with unknown companies and people.

Margins in the natural foods distribution field are shrinking by most accounts. The *Natural Foods' Merchandiser* estimates that distributors of natural products made between 19 and 21 percent in margins in 1995, down from 33 percent in previous *years*. The *Natural Foods Merchandiser* notes, however, that natural products distributors still earn a higher margin than their mass market counterparts (Esterson, 1995). And, as their competition increases, natural foods distributors can still pull away from the pack and ensure their success by adding new products, carrying

Services Retailers Expect from Organic and Other Natural Foods Distributors

- 1. Assistance with category management (for instance, help with assembling the proper product mix and inventory for the store)
- 2. Identification of top-moving items and help with new item programs
- 3. Provision of educational brochures and other education materials for use in store
- 4. Provision of promotional and merchandising assistance (such as shelf talkers small advertisements placed at the point of purchase).
- 5. Provision of products that have Universal Price Codes (UPCs), sales reports, timely and accurate price changes, inventory protection, product liability insurance and electronic ordering

brand name commodities or simply becoming larger. One way to become larger is to attract the new venture capital that has started flowing into the organic and natural foods markets: another is to acquire or form a strategic alliance with another firm.

Distributors' Perspectives

The 37 distributors who participated in the Wallace Institute survey handled a mixture of organic and natural food products. They had been in business for an average of 17 years, with a median of 16 years and a standard deviation of 8.7 years. One had been in business for a full 47 years; another had been in business less than one year. Sixteen of the distributors sold organic and natural foods products internationally:

The shares of natural foods sales varied widely among the distributors in the survey Sixty-five percent said that from 90 to 100 percent of their sales were in natural foods, 19 percent quoted a figure between 50 and 80 percent, and the remaining 16 percent said that natural foods accounted for less than 40 percent of sales. This distribution reflects the varied tacks that distributors can take in terms of natural foods. If the)- decide to sell primarily organic and other natural foods, they risk being pulled down if the natural foods tide begins to turn. If they don't sell primarily natural products then they may fail to attract the consumer base they originally targeted. However, retailers look first to those distributors that can provide them with all of the products they need at once. They want to avoid the extra costs associated with building multiple relationships with specialized distributors. At the same time, they want to get the highest quality products from distributors who genuinely understand those products. All types of distributors have the opportunity to excel in product and service provision - no one particular size of business or business philosophy has a clear edge in all cases.

The intermediaries we surveyed distributed a wide variety of products. Fourteen (38 percent) of the respondents sold grain products. However, only two (5 percent) of them sold more than 90 percent grain products. Although 10 (27 percent) sold fruit, only one sold 100 percent fruit: all of the others sold 50 percent fruit or less. Six (16 percent) sold vegetable products. Although none of the six sold more than 50 percent vegetable products, the two who sold the

highest percentage (40 and 50 percent, respectively) also sold a large percentage of fruit products. Nine of the distributors (24 percent) we surveyed sold dairy products, while five sold meat products. The highest percentage of sales in these two categories was 75 percent in dairy More distributors were involved in selling legumes than anything else - 18 in all. Two sold 100 percent legumes while all the rest sold 50 percent or less. Finally, 15 distributors sold 40 percent or less in fats, 16 sold 60 percent or less in sweets and one reported selling 5 percent in liquor. The wide range of product mix reflects the changing character of the organic foods industry. Initially, most organic products were fresh produce, grains and legumes, and distributors specialized in particular products. Over time, more items have been produced organically, and distributors have added more products to their lines.

Twenty-five of our 37 respondents reported that at least some part of their product mix included items that do not appear in the product categories defined in the survey (see Appendices A and B). Close to half of these 25 reported that such items comprised SO percent or even 100 percent of all their products. The fact that many distributors carry a large percentage of non-food items means that they feel a distinct need for a diverse product mix. Many distributors see high complementarity between food and non-food items. Of the food items, top-selling products cover a large range, from energy foods to supplements to rice products.

Even though ECR techniques can have a large impact on the day-to-day business operations of distributors, they had not been widely adopted by the natural foods distributors surveyed. Only 16 percent were involved in category management or did activity-based costing. Even fewer (2 and 5 percent, respectively) tried electronic data interchange and continuous replenishment. These figures contrast markedly with those reported for mass market wholesalers by the Food Marketing Institute. According to the FMI's 1997 annual report, The Food Marketing Industry Speaks -Detailed Tabulations, 35.9 percent of all mass market wholesalers divided products into formal categories. A total of 36.7 percent used electronic data interchange; only 13.4 percent used continuous replenishment. The percentage of companies using activity-based costing varied: only 4.6 percent with some projects completed used the system; 11.8 percent with pilots in progress did; and those with plans for nest 12 months comprised 24.8 percent.

United Natural Foods: Making National Distribution a Reality

United Natural Foods, Inc., is the country's leading independent distributor of natural foods and related products. In fact, with the exception of Tree for Life, it is the United States' only national natural foods distributor. United Natural sells groceries, general merchandise, nutritional supplements, bulk and food service products, personal care items, perishables and frozen foods.

United Natural is a success by all accounts. Between October 1997 and October 1998, its gross profit increased about 24.6 percent (\$8.4 million) to a total of \$42.6 million. The company operates out of three regions: as Cornucopia Natural Foods and Stow Mills in the East, Rainbow Natural Foods in the central region and People's Mountain Warehouse in the West. United Natural also operates 16 retail natural foods stores through its subsidiary, the Natural Retail Group, in the eastern United States. The company sold three of its retail stores to Wild Oats and one to Mrs. Green's Natural Markets in April 1999. It remains the primary supplier to these four stores, continues to operate 11 retail stores and is in the market to acquire more.

United Natural went public in June 1998. offering 3,250,000 shares at \$23 each. As a maturing company, it has invested significantly in streamlining operations and recently commissioned a KMPG study that found \$3.4 million in operating excess (unnecessary expenditure). As a result of the study, the company decided to focus on its distribution efforts and has continued to grow by opening new distribution centers in new geographic areas and expanding existing ones. To improve efficiency, the company is continually integrating accounting and administrative functions, expanding marketing and customer service, expanding national purchasing opportunities, consolidating systems applications between physical locations and regions. and reducing geographic overlap between regions.

The company has also been involved in strategic mergers and acquisitions. It concluded a merger with Stow Mills in October 1997 and, in September 1998, acquired Albert's Organics. Albert's Organics was the largest wholesale distributor of organic fruits and vegetables in the United States, with sales of nearly \$50 million in 1997. Albert's brought a wealth of expertise in sourcing and handling organic produce that complemented United Natural's sales force and distribution resources. it also brought to the table 800 customers, three distribution sites and 450 products. United Natural also recently acquired Hershey Imports, an international trader, roaster and packager of nuts. seeds, dried fruits and snack items.

The bulk of United Natural's sales are made to independent retailers and some supermarket chains, although they are not its largest single customers. The firm sells 26,000 products to more than 6,500 customers in 47 states, serving natural product superstores, mass market retailers and independent retail operators. Its top two customers are the country's two major natural foods retailers: Whole Foods and Wild Oats. Although Whole Foods is the largest customer. accounting for about 16 percent of the company's net sales in 1998, conventional supermarket accounts are the company's fastest growing sector nationwide. United Natural sees many more mass market retailer prospects in development.

Survey Results: Top Challenges for Natural Foods Distributors

- · Lack of current standards and uncertainty about future standards
- Pricing and marketing
- Finding appropriate agricultural producers
- Distributing enough of the desired products to retailers

The relatively low use of ECR techniques is not surprising. First, natural foods market distributors are likely to be small, making it financially challenging for them to absorb the cost of investing in ECR technology. Further, because natural foods distributors have traditionally conducted business through personal relationships, they are used to dealing with retailers who understand them and to having a recognizable set of consumers interested in their products, reducing the need for ECR technology. As a result, some of these distributors are not ready to deal with the new retail outlets and mass market consumers (NFM). Their lack of preparation has created an opening for both mass market distributor's who can find their way into this profitable niche and for natural foods distributors who can grow to serve mass market retailers in the manner in which they are accustomed.

Thirty-five percent of the distributors surveyed saw lack of government standards as a major challenge: 41 percent saw uncertainty about future standards in the same light. They expressed concern regarding pricing and marketing natural foods (38 percent) and finding farmers who could ensure a consistent supply of products (32 percent). Another major challenge, said 27 percent of the distributors, was insufficient market supply.

Nearly 60 percent of the distributors attempted to create a natural foods label. Eighty-two percent of those who tried it rated it as a successful business strategy. Many distributors tried various forms of advertising: more than 85 percent provided in-store advertising and demonstrations. This strategy appeared preferable to newspaper and direct mail advertising, which was tried by only 24 percent of the respondents. Twenty-six (70 percent) of the distributors surveyed attempted to succeed in the natural foods market by diversifying their offerings, while 68 percent did so by increasing their scale. A full 68 percent also said that they

had tried to target a market for their products. Such targeting activity can take many forms. Some are quantitative and sophisticated; others reflect only the instincts of a particular management team. In terms of working with other businesses in the industry, only 27 percent of the distributors had attempted to join a cooperative or other limited partnership. However, a full 59 percent have been involved in some type of contracting arrangement.

Findings

More than one-third of the survey respondents expressed concern about government standards for organic food. A natural response would be to develop an individual label, one that would convey information to the buyer about its quality, as well as identifying the product as organic. One of the distributors (Rootabaga) developed natural foods labels, as did more than half of the survey respondents. Most survey respondents who tried this technique indicated that their labels successfully increased their business.

The survey and the case studies suggest that many distributors feel they face insufficient market supply Their perception may be accurate, and there may indeed be fewer organic, eco-labeled and other natural products on the market than retailers ask distributors to provide. Second, there may be a lack of adequate communication between the generally smaller and less technologically sophisticated natural foods suppliers than there would be in the mass market. This difficulty in transmitting information along the marketing chain may cause breaks in the natural food supply Third, farmers and manufacturers may have grown quickly, but not in a way that improves the flow of the desired natural foods products to distributors, retailers and consumers. It is not surprising that distributors - who are the link between manufacturer and retailer - would bear the brunt of this miscalculation and lack of information and communication.

Rootabaga Enterprises: Specializing for Success

Rootabaga Enterprises, Inc., began in 1984 as Roger's Brokerage, a distributor of fresh produce located in Sedro-Wooley, Washington. Under the direction of founder Roger Weschler, it was a part of Cascadian Farm before being reborn in 1993 as Rootabaga Enterprises. Rootabaga is now a premier broker of a wide variety of organic and "transitional" products (grown on land making the transition to organic status). It has remained a viable business in the face of competition from much larger, national organic and natural foods suppliers by providing quality and service.

Rootabaga sells organic and transitional apples, pears, fruit, vegetables, jams, jellies, apple juices and other products to wholesalers, retailers, manufacturers and food services. Under the fresh produce part of the operation, called CF Fresh, Weschler maintains four separate labels. Viva Terra is the label used for organic apples, pears, garlic, apple juice and other commodities. Viva Terra products, which originate in Washington State, Chile and Argentina, are sold throughout the United States. Rootabaga Country is the label for organic vegetables grown and sold in the Northwest. Stellar is the label developed for organic fruits sold in British Columbia, Canada. Many of the Stellar label products are also grown in Canada. Nature Conserve, the fourth label, was developed exclusively for transitional products, including juices.

Rootabaga's use of four different labels highlights the trend in the natural foods industry of targeting consumers in an extremely precise way. In essence, customers are being placed in niches of their own, at least for the purposes of marketing. The concept of "one size fits all" product development and marketing is becoming less prevalent as this trend takes hold. Although the trend of specialized product introduction and marketing applies to all types of products. it has been adopted especially by those supplying premium, gourmet or specialty products

Rootabaga chooses its international suppliers carefully, ensuring that they are trustworthy organizations and businesses that will uphold the strict standards and conventions required of U.S. suppliers. In Argentina, for instance, Rootabaga works with just one farm. Agro Roca S.A., which is making the transition to organic production with the assistance of the Argentine Ecological Foods Foundation. Rootabaga has been working with the farm, which now has 80 acres of organic pears and apples, for four years. In Chile, the company works with three different operations, one of which is composed of several growers. Another is the only organic producer in Chile that has been certified to sell organic products in the United States. Five separate British Columbian operations are linked with Rootabaga, one of them a partnership between two farms. In dealing with each international operation, Rootabaga goes several extra steps to make sure that the products it buys are organic or transitional, and that they meet all of the guidelines the company sets out for its growers. Specifically, the company provides direct support to the farmers it works with through "grower representatives." These representatives provide knowledge, expertise and assistance to farmers on a variety of topics.

With all of these farms helping to provide buyers with organic and transitional products, Rootabaga manages to have a wide variety of items - including garlic, ginger, apples, limes, pears and pineapples - available year round. Other products available on a seasonal basis include plums. peaches, nectarines, grapefruit, cherries, apricots, asparagus, beets. onions and potatoes. The company would be more attractive to potential buyers if it could provide a year-round supply of an even larger number or products, But Wechsler and his staff keep their eyes on the main goal: providing the highest quality products and the best service possible to their customers.

Interestingly. the company also donates time to related non-profit and trade organizations, as well as a small percent age of its profits to the Organic Farming Research Foundation research fund, which is distributed in the form of small grants to organic farmers. Rootabaga is a member of the Organic Trade Association, the Community Alliance with Family Farms and the Committee for Sustainable Agriculture. Such contributions are a hallmark of companies that are interested in working toward the public good, being stewards of the land and striving to help create a more sustainable food system as a whole.

In the mass market. ECR techniques foster efficient information and product flow,

The case study of United Natural Foods reveals that the company employs many of the techniques used by mass market distributors. such as ECR. Adopting these marketing technologies is probably essential, since United distributes to large chains, both natural and mass market, and it is likely that large retailers will conduct business only with distributors able to provide these services. In addition, United distributes a wide variety of products, from fresh produce to manufactured goods. In contrast, according to the Rootabaga case study, it seems that smaller distributors specialize by product or product category Instead of relying on high-tech methods, these companies put their emphasis on customer service and personal relationships.

Manufacturers of Organic 'and Natural Processed Food Products

Manufacturers convert raw agricultural products into prepared and processed foods such as canned and frozen vegetables, pasta, ice cream and cookies. Manufacturers of both conventional and organic foods must cope with the problems of how to produce a uniformly consistent product and how to secure shelf space in the supermarket. However, manufacturers of organic products face three additional challenges: how to secure a large enough and cheap enough supply of organic ingredients, how to verify that those ingredients are organic and how to maintain their organic integrity during processing. Manufacturers of conventional processed foods can overcome the supply problem by contracting directly with farmers or by establishing ongoing relationships with them. Recently, some large organic manufacturers have begun contracting with farmers and also working closely with them to provide guidelines for what kinds of products are needed. Manufacturers of conventionally produced goods often pay fees to secure shelf space (called slotting fees). Although no definitive information is available. industry trends point to the possibility that organic food manufacturers are heading in the same direction.

Organic foods have traditionally been manufactured by small businesses that fit into a profitable niche in a region Their success, like that of many organic and sustainable food businesses. can be attributed in many cases to a blend of quality, taste. safety, environmental attributes, attributes of local production (sometimes known as regionality) and artisanship (IATP, 1999). However, the market for organic foods was fairly small and specialized when many of these businesses first opened their doors. That market is much larger now and, as mass market food businesses enter it. many long-time organic foods manufacturers must merge and grow to stay competitive. (Others, of course, remain small and serve regional niche markets.)

Market growth presents opportunities for traditional organic manufacturers such as Cascadian Farm, which has been able to increase the scale of its operations to meet growing demand (see case study). Nonetheless, market growth may also be threatening to other manufacturers, who may stand to lose market share to large businesses that create products similar to their own. In addition, increased competition and market size may mean that these manufacturers will lose the market premium that their product once commanded. Whether these changes are threatening depends in large part on whether the manufacturers can carve out and maintain their market shares through quality and price competitiveness.

Manufacturers of natural foods are increasingly interested in selling in mass market venues. Unfortunately, they lack the expertise and-experience of their competition (mass market distributors) when it comes to knowing what to offer customers (NFM). Like retailers and wholesalers of organic foods, as well as many small conventional industry members, they have been slow to adopt ECR techniques, which can be invaluable in streamlining and minimizing the costs incurred on the path from the assembly line to the consumers' shopping cart.

Many natural foods market manufacturers are interested in growth strategies. The great majority have been growing rapidly and plan to continue doing so for the foreseeable future (OTA, 1999). Supply chain management is increasingly complex for these businesses, and many are as yet unable to cope adequately with the problems this complexity brings. Many natural foods manufacturers have been growing swiftly without well-defined growth plans, which means they have run into severe logistical problems. On the farm side. manufacturers are concerned with obtaining a supply of high quality inputs. On the retail side, manufac-

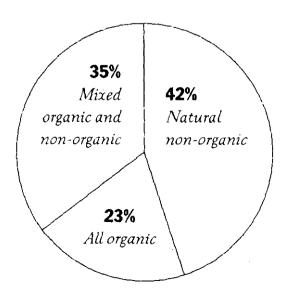
turers are concerned with finding and maintaining markets for their products, These challenges are common to natural and conventional manufacturers, but most conventional manufacturers have more experience in dealing with, and knowing how to avoid, both (NFM).

Many manufacturers of organic foods, natural foods or a mix of the two have not yet had to provide the services that their mass market counterparts provide to distributors and retailers (NFM, FMI). They have traditionally been involved in selling their products to distributors and retailers who cater to "the converted" - consumers who are already interested in natural foods and take the time to go to health foods stores. The failure to provide these services is becoming costly as manufacturers are increasingly working with mass market distributors and retailers.

Manufacturers' Perspectives

Thirty-two natural foods manufacturers participated in the Wallace Institute survey Of these, 23 percent said that they manufactured only organic products, 35 percent produced a mix of organic and non-organic natural foods (or products made with a certain percentage of organic ingredients) and 42 percent produced only non-organic "natural" foods products. "Natural" foods manufacturers may or may not use food from farmers using sustainable agriculture techniques, and may or may not mark some or all of their products with third party certified eco-labels such as "IPM" (integrated pest management or "reduced pesticide"). They were included in the survey because, as a group, they are highly likely to use some organic agricultural products in the future.

PERCENTAGE OF 3 DIFFERENT TYPES OF MANUFACTURERS IN SURVEY



The seven organic manufacturers surveyed had been in business for an average of 12 years, for periods ranging from 20 years to just five years ago. Six of the seven reported that 100 percent of their sales came from natural (as opposed to strictly organic) foods. The "mixed" manufacturers that we surveyed had been in business for an average of 17 years, for periods ranging from 42 years to only two years. The natural foods manufacturers were in business for an average of 13 years, with the longest in business for 30 years and the shortest for three years.

YEARS IN BUSINESS: AVERAGE AND
RANGE FOR EACH OF THE THREE
CATEGORIES

	Average	Range
Organic	12	520
Mixed	17	242
Natural non-organic	13	3-30

No organic manufacturers had the same top-selling items. Each had a different "top three" list, which generally included such products as chocolate, oils, beverages, soy products, dairy products, rice products. snack foods and vegetables. Three of the seven said they had sales outside the United States. Of the 13 natural foods manufacturers in the survey, four manufactured legumes (all at 20 percent or less), three manufactured grains (one at 100 percent, one at 97 percent, and one at 10 percent); and three manufactured dairy products (one at 100 percent and two at less than 5 percent). Four manufactured sweets (two at 100 percent, one at 60 percent and one at 20 percent). Others manufactured products using fruit (30 percent and 25 percent), vegetables (100 percent and 6.5 percent) and fats (5 percent). Six manufacturers said they manufactured "other" products such as herbs, spices, energy bars, supplements and vitamins. Four manufacturers devoted themselves exclusively to manufacturing these "other" products. Eight of the "mixed" manufacturers in the survey sold products internationally. Five of them manufactured fruit and vegetables (with one

The Coulee Region Organic Produce Pool Cooperative: On the Cutting Edge

Headquartered in La Farge, Wisconsin, the Coulee Region Organic Produce Pool (CROPP) Cooperative began in 1988 with only seven vegetable farmers. Since then, it has become the largest organic farmers' cooperative in the United States, representing 160 farm families in nine states from Maine to Oregon. The cooperative has been highly success ful: its revenues doubled over the past few years to reach more than \$30 million in 1999. Currently selling products in all 50 states and Japan, CROPP is considering expanding to more international outlets once it can meet current demand for its dairy and vegetable products. At this writing, it employs and supports a total of 350 people. All of its products conform to an agreed-upon definition of "organic": they are produced through "a system of philosophy and production that mirrors the natural laws of living microorganisms and emphasizes the interdependency of all life."

CROPP, which is made up exclusively of small and mid-sired family farmers. has always been on the cutting edge of the organic foods industry. The nation's first organic vegetable and dairy cooperative, it was also the first organic milk producer for Horizon organic yogurt in 1992. In addition, it developed the first organic cheese in the early 1990s. It currently manages a pool of produce, dairy, poultry and meat producers, and under its own brand, Organic Valley, sells a wide variety of cheese, butter. egg and vegetable products as well as milk. The cooperative also sells eggs, beef, all beef hot dogs and ground beef under 'the Valley's Finest label, due to restrictions on using the organic label on meat products. (Since the USDA decided to allow organic meat certification and labeling, the company has expanded its meat offerings from 3 products to 22 in anticipation of latent consumer demand.) All in all, Organic Valley's dairy products constitute 90 to 95 percent of total sales. Demand for Organic Valley dairy products, and for its seasonal produce, far exceeds supply, the company reports.

CROPP has taken several steps toward becoming a value added, vertically integrated enterprise. It maintains its own warehouses and has invested in a production system for cutting and wrapping its own products. CROPP also runs the former Chaseburg Creamery in Chaseburg. Wisconsin. which manufactures organic cultured and salted butter and organic milk powders. It reloads liquid organic milk here into tankers for further shipment. These steps toward vertical integration help to lower operating costs and improve quality control and milk utilization,

Despite these substantial investments, CROPP does not have all of the production. distribution and marketing capabilities that it needs. The cooperative's farmers view this as an opportunity to help other small businesses stay afloat. For instance, besides its own Chaseburg Creamery, CROPP uses 25 small to mid-sized facilities nationwide to produce and co-pack its line of dairy products. It also uses independent milk haulers and semi drivers to deliver its milk.

CROPP's soil. crops, livestock, manufacturing plant and packaged products are all certified organic by an independent certification organization. (The Chaseburg Creamery, for instance. is certified by Oregon Tilth, an Oregon-based certification organization.).

CROPP has carried its interest in organic and sustainable food outside U.S. borders. Organic Valley Ultra Fresh Organic chocolate milk, for instance, contains organic chocolate grown in Costa Rica on the Talamanc-Carribean Biological Corridor's 90.000-acre wildlife reserve and organic sugar from Paraguay. CROPP is careful to establish farmer-determined food prices to reflect fair return and to use these prices to guide the cooperative's marketing. CROPP's farmers make a significant premium for their products over the prices for their conventional counterparts. The cooperative also tries to assist others in making connections in the organic foods market. "The Organic Trader." which appears on the Organic Valley website, includes classified advertisements about feed grains, forages, livestock and other items. as well as special announcements. The web page also features information about the company and eye-catching graphics.

Organic Valley products are sold through four distribution channels: natural foods warehouses, chain warehouses, jobbers (independent conventional grocery warehouses) and food services. Theresa Martinez, CROPP's operations director, estimates that close to 60 percent of sales come from natural food warehouses. Chain warehouses and jobbers together make up about 40 percent; food services generally constitute less than one percent. CROPP recently started using electronic data interchange (EDI) with some of its larger customers (a small percentage of customers overall).

The Coulee Region Organic Produce Pool Cooperative continued

Most orders still come in by fax, however. Eventually, one of the cooperative's seven primary goals is to market food as directly as possible to the consumer. It will custom manufacture most dairy, egg and meat products to customer specifications.

CROPP has been extremely active in the public policy world. Organic Valley employees, for instance, wrote an analysis of the proposed national organic rule for their customers and, through an advertisement. asked their customers to. submit comments. CROPP farmers organized the first national initiative to allow the certification of organic meat. The cooperative also fought for the right to label poultry and egg products as organic, as well as for the right to label its Organic Valley dairy products as rBGH-free. Anther effort involved working with consumers, environmentalists and other farmers in suing the U.S. Environmental Protection Agency to withdraw the registration of genetically engineered Bacillus thuringiensis (Bt). because it threatens sustainable agriculture, and to withhold approval of any new biotech-related registrations. CROPP farmers regularly speak at seminars and continually experiment on their own farms to discover the best ways to produce high quality, certified organic dairy, meat and vegetable products.

each in the 100 percent category), while three each manufactured legumes and sweets. Only two manufacturers produced products using grains (both under 20 percent), one manufactured products using a small percentage of dairy ingredients and one manufactured wine. None manufactured products using fats.

Few of the manufacturers surveyed had adopted ECR tech-

niques. Only two of the organic manufacturers used electronic data interchange and only one used continuous replenishment. As more natural foods companies become larger and more experienced, and as these companies

increase the amount of business that they do with mass market distributors and retail supermarkets, it is likely that more will adopt these techniques. They will need to do so to remain competitive with the mass market manufacturers who are becoming increasingly interested in organic and other "natural" food products.

Slightly more natural foods manufacturers than organic food manufacturers used ECR techniques. Four used category management, three used activity-based costing, two used electronic data interchange and one used continuous replenishment. Just one of the natural foods manufacturers used all four techniques. Natural foods manufacturers'

greater use of ECR techniques (relative to the organic food products) may be due to the fact that they are generally bigger and more involved in the mass market foods market than organic foods manufacturers. More natural foods manufacturers are pricing their products within the mass market product range and have had more success thus far at crossing over into the mass market venues.

ManufacturersLack of current standards and uncertainty about

future standards

Top Challenge for Natural Foods

ECR techniques were most popular with the group of "mixed" manufacturers.

Three participated in a category management program, three in electronic data interchange and three in activity-based costing. Four were

involved in continuous replenishment. Two of the companies used all four techniques,

In contrast to the retailers, distributors and farmers participating in the Wallace Institute survey, manufacturers saw few major challenges to their success in the natural foods market. The only significant obstacle, in their view, was the lack of current and future government and industry standards for natural foods. However, less than half (43 percent) of the manufacturers perceived lack of standards to be a major problem. Manufacturers know that for consumers to feel confidence in and loyalty toward their products, they need to live up to high expectations.

Cascadian Farm: Making Organic Equal Convenient

If you have ever been in a natural foods store or the natural foods section of a mass market supermarket, you have most likely seen the brand name Cascadian Farm. Now the largest organic foods company in the world, Cascadian Farm produces, manufactures, distributes and markets a wide variety of food products globally in eight major food cat egories. Cascadian Farm products are sold in both natural and mass market retail stores in the United States, Japan, England. Canada. Australia, Singapore and Korea. Sales have been growing at 40 to 50 percent each year over the past few years. The company attributes its success to founder Gene Kahn's recognition that controlling processing, distribution and marketing functions is key to producing high quality products and professional service.

Casadian Farm began in 1972 as a small, local supplier of fresh organic produce based in Sedro-Wooley. Washington. Its first processed product was strawberry jam, a creation born of frustration with the short shelf life of fresh organic strawberries. The jam was a success. and the company soon started a line of frozen fruits and vegetables. Some of its newest products are Veggie Bowls, Vegetable Stirfry Blends, a variety of sweet frozen treats and an array of organic boxed vegetables. Cascadian Farm now supplies more than 150 organic products in categories including frozen desserts, frozen novelties, frozen vegetables, vegetarian meals and entrees, frozen fruit, frozen juices, pickles and kraut. and fruit spreads. In addition to selling processed products, Cascadian Farm also sells bulk products such as organic processed vegetables, fruits, juices, pickles, potato flakes, chopped spinach and other ingredients to both domestic and international food manufacturers.

Cascadian Farm cannot, of course, produce all of these products by itself. As the company grew, to its current proportions, its production demands became so great that it began to contract with farmers in the Pacific Northwest to provide additional organic produce. Because the company could not find enough organic farmers to supply its needs, it recruited and trained hundreds of new ones. Cascadian Farm has now developed a complete agricultural services division. which provides these farmers with information on agricultural research and development, field services and purchasing.

Marketing is crucial to Cascadian Farm's growth and continued success. The company markets its products in both natural foods stores and mass market supermarkets. It also maintains a good web site that contains a wide range of information about organic foods, the company and how to order its products. The company sells itself on the "combined strengths of [its] agriculture, production and quality assurance teams" and its ability to satisfy the need for "consistent supply and quality" to other manufacturers. It also devotes a significant amount of capital to advertising and "brand building."

Cascadian Farm is owned by an umbrella organization. Small Planet Foods which was also created by its founder. A strategic alliance between Fantastic Foods, Muir Glen and Cascadian Farm Small Planet Foods was developed to create a worldwide organic foods company and to penetrate both natural and mass market foods channels. Total sales in the categories that the companies owned by Small Planet Foods compete in make up 30 percent of all natural foods sales in those categories (about \$4 billion annually). The alliance plans to expand through future acquisitions. Cascadian Farm has recently been in merger negotiations with General Mills. If this merger is approved by the Federal Trade Commission, it will be one of the largest mergers concerning an organic food company to ever take place,

One main goal of Cascadian Farm is to bolster consumer support of sustainable agricultural systems. The company is a self-proclaimed advocate for sustainable living and a leader in the fight for worldwide organic standards. It puts its convictions into action in several ways. Through its affiliation with the Organic Outreach Fund of the Organic Trade Association, it helps to educate consumers and the food industry on the benefits of organic production. Cascadian Farm also works with Community Alliance with Family Farmers, which is dedicated to community organizing, policy advocacy, education and helping conventional farmers learn organic methods. Founder Gene Kahn was a charter member of the National Organic Standards Board, where Cascadian Farm is still represented by a high-level staff member,

Many manufacturers who sell products in the natural foods market are in the business of developing labels for natural foods. In fact, all of the organic manufacturers in our survey tried to develop a natural foods label; 85 percent of the natural foods manufacturers and 91 percent of the mixed manufacturers had done the same. Most felt that developing a label had been a successful business strategy. However, their responses concerning the success of newspaper advertising and other direct mail advertising were a different story. Fully 57 percent of the organic producers had tried this business strategy, but not one rated it as a success. The 62 percent of natural manufacturers and 73 percent of mixed manufacturers who tried using newspaper advertising and other direct mail advertising agreed.

Growth strategies addressed in the survey included diversifying offerings, targeting a market and increasing scale of operations. Seventy-one percent of organic manufacturers had diversified their offerings, as had 82 percent of the mixed manufacturers and 54 percent of the natural foods manufacturers. All of the organic manufacturers surveyed had targeted a market as a specific business strategy; 91 percent of the mixed manufacturers and 62 percent of the natural foods manufacturers had done so. All of the organic and mixed manufacturers had attempted to increase the scale of their Operations, while 77 percent of the natural foods manufacturers had done so. Taken together, organic and mixed manufacturers were more likely to be implementing the three growth strategies than their non-organic counterparts.

Of the organic manufacturers surveyed, only 19 percent had contracts with suppliers and only 14 percent had joined a cooperative or limited partnership. For mixed manufacturers the percentages were significantly higher: 91 percent had contracts with suppliers and 27 percent joined a cooperative or limited partnership. Among the natural foods manufacturers, 46 percent were in contracting relationships and 23 percent in cooperative or limited partnership relationships with other manufacturers. The survey results clearly indicate that the organic manufacturers surveyed were less likely to take part in these types of collaborative activities.

Findings

Sales of manufactured organic goods are experiencing the fastest growth of all organic food categories. Anecdotal evidence suggests that natural foods retailers are eager for new products, especially those that meet consumer demands for convenience. Accordingly, manufacturers do not perceive significant barriers to success, although standards remain an important issue (as reflected by the survey results and the involvement of both Organic Valley and Cascadian Farm in the national debate surrounding organic standards).

Because demand is so high, procuring sufficient supplies of high quality products is a challenge for all manufacturers, regardless of whether they sell conventional, natural or organic products. Contracting and cooperatives are two common solutions to this challenge for conventional and natural foods manufacturers alike. The survey indicates that "mixed" and natural manufacturers have entered into contracts more often than their organic counterparts. Yet without more specific contract information, it is difficult to discern why the frequency of contracts differs. The case studies show that two companies have employed very different methods for procuring supplies. Cascadian Farm directly contracts with farmers and helps them to make the transition from conventional to organic farming. CROPP, which runs Organic Valley, cooperatively markets organic dairy products. As most conventionally grown dairy products are sold cooperatively, CROPP is following an already established marketing strategy.

Branding is a strategy extensively used by conventional manufacturers, usually as an attempt to separate their products from the multitudes in the marketplace. Although organic food shelves are not yet as congested as conventional ones, manufacturers of natural food and organic products are also developing brand names. The survey shows that all of the organic, 85 percent of the natural and 91 percent of the mixed foods manufacturers had developed a natural foods label. Both manufacturers featured in the case studies used the same strategy: the names Cascadian Farm and Organic Valley appear on a wide array of organic products.

Farmers of Organic and Natural Foods

Marketing is a significant challenge for most farmers. They usually have little say in the prices they garner for their products in the marketplace. This is because most agricultural commodities are grown on a large number of farms and are sold to a small number of buyers (e.g. manufacturers or retailers). Farmers have developed a number of different strategies to get higher prices despite this imbalance of power. One strategy has been to market products collectively through marketing cooperatives. By pooling their output and acting as one selling agent, farmers are often able to meet buyers from a position of greater strength and command higher prices. But the process of forming a cooperative (and receiving the average price of the pooled output) makes one farmer's output indistinguishable from another's This situation creates an incentive for some farmers to slack off and produce low quality products, subsequently undermining the effectiveness of marketing as a group. Thus, marketing cooperatives are not always successful.

Another response has been for farmers to form marketing agreements and strategic alliances. Marketing agreements and strategic alliances can take many forms, but most are designed to help farmers (and shippers) draw on one another's inventories. thereby increasing their market share. These strategically related farmers and shippers are able to provide a wider range of crops and varieties than they could independently thereby gaining an advantage over other farmers and shippers with limited offerings. One such agreement reported in *The Packer* was concluded between an apple shipper and a pear shipper: each could provide buyers with one source for both products. In other cases. farmers have pooled resources and built large packing sheds. These kinds of strategic alliances are beginning to occur between conventional and organic farmers. In 1999. the country's second largest conventional lettuce grower (Tanimura and Antle) and its largest organic vegetable shipper (Saturn1 Selection Foods, which markets the Earthbound Farm brand) became partners. with the aim of supplying organic lettuce to large, mass market supermarkets (The Packer. October 1999).

Most marketing problems faced by organic farmers are the same as those faced by more conventional farmers: where to market their products and how to receive the highest possible prices for them. In addition, organic farmers must contend with the entry of large agribusiness firms that see organic production as a new, profitable area in which they can develop a high margin business (IATP. 1999). However, the viability of organic farms has not been seriously jeopardized by the entry of large firms such as General Mills and Dannon. Small organic farmers do not seem to be experiencing difficulties as severe as those of conventional farmers, who are struggling to compete with large conglomerates.

Like some of their conventional counterparts. some small organic farmers are also turning to direct sales, either on their farms or in farmers' markets. local restaurants and local grocery stores. Organic farmers have also relied on CSA - community supported agriculture - arrangements as an alternative marketing technique. In a CSA arrangement, consumers purchase "shares" from a farm for a fixed price, acting as creditors and bearing production risk. According to a survey conducted in 1997 by the Organic Farming Research Foundation (OFRF). fruit. vegetable and livestock farmers use direct marketing most frequently; field crop farmers use it infrequently. Of the 28 percent of fruit, nuts and tree crops marketed directly to consumers. 40 percent of them were sold on the farm, 42 percent in farmers' markets and 15 percent through a CSA.

The market for foods grown by organic or sustainable agricultural methods has become significantly larger and more complex. For those who want to make the most of their businesses in this market. the two most critical factors are producing the right product and ensuring the quality of the product. For farmers, this means listening carefully to their buyers and getting correct and timely information about prices and markets available to them Buyers. by definition, have more close contact with the consumer and therefore know more about what consumers want from the natural foods market, and what they are willing to pay for organic and other eco-labeled foods. Farmers of organic and sustainable produce want to be sure that the food they grow is handled and processed according to the standards necessary to garner adequate profits. They understand that they are responsible for producing products that consumers can buy with confidence - especially as they are paying a premium for benefits that are not immediately apparent.

According to the OFRF survey, 56 percent of all organic

farmers surveyed planned to increase the number of acres they had in organic production. Sixty-three percent planned to increase the number of markets and/or buyers and 74 percent planned to increase the volume of organic product they marketed (OFRF, 1999). The survey results indicated that most farmers marketed their organic products through wholesalers: 51 percent of fruit farmers, 61 percent of vegetable farmers, 72 percent of livestock and animal products farmers, and 82 percent of field crop farmers. A smaller percentage of farmers made direct-to-retail sales: 22 percent of fruit farmers, 19 percent of vegetable farmers, 8 percent of animal products farmers and only 6 percent of field crop farmers. In comparison, anecdotal evidence suggests that most conventionally grown fruits and vegetables are sold directly to retailers.

When asked about how they wanted to change their marketing strategies in the next several years, 77 percent of all respondents to the OFRF survey said that they would like to increase their sales at the local level. Seventy-four percent were interested in doing more direct to consumer sales. Thirty-nine percent wanted to increase their export sales (OFRF, 1999).

The federal government collects and publishes shipment and price information for many agricultural products (for example. fresh fruits and vegetables and grains). Suppliers and buyers USC this information when making shipment decisions and before entering sales agreements. Yet this information is not available for organically grown commodities, making it difficult for farmers to have access to pricing and marketing information. Generic market channels and marketing information for organic products are not available to organic farmers either, making it difficult for them to price their products and market their products to the best possible advantage. There are only several small generic sources for this type of information, such as "The Organic Trader" (www.organicvalley.com/trader.thm) and the Organic Farmers Marketing Association's (OFMA) "Farmers' Market" (web.iquest.net/ofma/4sale.htm).

The OFRF survey asked farmers about the proposed national organic standards. The three wishes most frequently expressed by farmers were that a national standard would "establish a level playing field for all U.S. organic producers," that a stringent standard would be established, and that consumer education and awareness about organic food

and farming would accompany the national standard. Farmers were concerned that the national standard might weaken the meaning of "organic," that genetically modified organisms would be permitted and that the cost of using a national standard would be prohibitive (OFRF, 1997).

Farmers' Perspectives

Twenty-eight farmers took part in the Wallace Institute survey. Eighteen produced all of their products organically; and 10 produced some food organically and also used other sustainable agricultural production methods (e.g. reduced pesticide). All 28 farmers considered themselves part of the natural foods market. The organic farmers had been in business for an average of 20 years. One of these farmers said that 95 percent of sales were made in the natural foods market: all of the rest made 100 percent of their sales there. Thirteen of the fourteen farmers using mixed (organic and other sustainable) techniques indicated how long they had been in business: the newest entrant had been farming for three years, the most senior had been farming for 34 years. These farmers average length of time in business was 1.5 years.

WHAT SURVEYED ORGANIC PRODUCERS GROW

Grains	39%
Legumes	11%
Vegetables	44%
Meat	33%
Dairy	40%-

The organic farmers surveyed grew a wide variety of crops (above). Thirty-nine percent of the respondents produced grains; of these, 17 percent produced only grains and 22 percent reported that grains constituted between 5 percent and 90 percent of their total production. Eleven percent of the respondents grew organic legumes: one counted legumes as 50 percent of output, while for the other they were less than 10 percent of output. Six of the organic farmers who grew fresh fruits and vegetables devoted some acreage to fruit crops, ranging from 1 percent to 35 percent

Pavich Family Farms

Pavich Family Farms. which has land in production in the San Joaquin Valley, California, and Dateland and Harquahala Valley. Arizona, is one of the largest organic family farms in the United States. It has 4,000 acres of 100 percent certified organic soil under cultivation. and another 500 acres in transition to organic certification.

Pavich is the largest producer of certified organic table grapes in the world. In 1997. It shipped 2.5 million boxes of 12 different varieties of certified organic grapes (up from 600,000 in 1983). But its range of products extends far beyond grapes: it markets more than 100 products, selling everything from apples (six kinds). cabbage and iceberg lettuce to dried pineapple, sweet corn and zucchini. In development are exotic products ranging from dates to macadamia nuts to tangelos. With this array of products, it comes as little surprise that Pavich is one of the nation's most successful marketers of certified organic produce. The business grew 300 percent from 1983 to 1998 and continues to grow 25 percent per year (higher than the 20 percent to 24 percent growth rate of the organic industry as a whole). Currently selling products in both conventional and natural foods supermarkets in the United States, Europe and Japan. Pavich plans to continue expanding its product line. The business has been so successful on production level matters and has such a wide range of production level expertise that its influence has come to extend beyond the organic niche. Even large conventional growers look to Pavich for information about producing high quality crops efficiently.

When Tom and Steve Pavich started Pavich Family Farms they knew they wanted not only to succeed as entrepreneurs. but also to make changes in the food system itself. They broke new ground in the 1980s when they began to introduce organic produce to mainstream supermarkets. They wanted big supermarket chains to step in and help the food system make a move toward sustainability and organic foods. However, lacking sufficient supply channels and fearful of casting aspersions on the rest of their produce, the stores did not do so.

Marketing in the early days was challenging because most of the Paviches' accounts were health food stores and co-ops - a steady but small market. A further problem was supply. After the Paviches convinced Ralph's Supermarkets, a conventional chain, to carry their organic grapes, they found they could not provide a continuous supply. But instead of giving up, the Paviches decided to acquire more acreage and expanded their operation. They eventually landed accounts with the Raley's, Jewel and Dominick's supermarket chains, as well as Ralph's and others. Size became an advantage for the Paviches because, unlike the owners of small farms, they were able to provide continuous supplies of organic products. After this initial success, the Paviches began to sell under their name fruits and vegetables that were partially produced by smaller farmers. In 1997, Pavich employed between 150 and 700 people depending on the season.

Pavich Family Farms is a business serious about using new. innovative ways to market its products. Not only does its web site have beautiful graphics. comprehensive issues and company information, and good ordering information; the business has also been unafraid to join forces with other organic farmers. For example, the company supplies raisins for the New Organics Company's raisin bran cereal. a union that marks the first time two organic food companies have teamed up to co-market a product. The Pavich Family Farms logo and a brief history of the business are prominently displayed on the raisin bran box. Pavich is also serious about supporting other family farms, It markets the products of 40 independent farmers. These farmers sell most of their produce through CSA (community supported agriculture) arrangements, farmers' markets and restaurants: they then sell their extra volume to Pavich. These extra sales allow many of them to stay financially viable.

Pavich Family Farms is run entirely by family members who do not intend to take their company public or sell out, Rather, they want the business to grow in a way that helps the network of small farmers they work with. That commitment includes working with certified organic fruit growers in Chile, Costa Rica, El Salvador and South Africa to help them find markets for their sustainably grown food products. Pavich has even developed a cooperative effort (its first) with a local organic cashew nut grower in El Salvador, which helps sustain indigenous plants and communities as well as contributes to the health and well-being of about 5,000 local residents.

Pavich Family Farms continued

When members of the Pavich family talk about the national organic standards, they speak from experience but do not always agree. Steve Pavich, who was on the National Organic Standards Board (NOSB), believes that the consumer, not the government, should call the shots. Tom Pavich, in contrast, believes that new government standards will help safeguard organic industry members. Both, of course, believe that organic foods must be kept pure and therefore they remain active in the public policy arena. In addition to serving on the NOSB, for instance, Steve is a member of the California Organic Foods Advisory Board, president of the Organic Farming Research Foundation and treasurer of the Organic Trade Association. He and his brother were among the first to lobby for state standards and certification for organic products. They also mailed out more than 5,000 alerts to their buyers, urging them to act by writing letters and sending e-mails urging USDA to develop strong organic standards

of total production. For 44 percent of the organic farmers, vegetables made up between 50 percent and 93 percent of total output. One-third produced meat (between 5 percent and 30 percent of total output) and 40 percent produced dairy products. (One produced dairy products exclusively; for the other three, dairy products comprised between 2 percent and 40 percent of total production).

Among the 10 farmers using a mix of techniques, several focused 100 percent of their efforts on one product, specializing in fruit, meat. grain and dairy products. Some farmers devoted more than 50 percent of their output to vegetables. Legumes and other types of crops were limited

to less than 3.5 percent of the surveyed farmers' output.

All of the farmers surveyed. whether they were wholly organic or used a mix of techniques, saw three major challenges to their efforts to succeed in the natural foods market. In their view, the first challenge was gaining new skills training, financing, equipment and/or processes.

Financing may be the most important part of this equation Organic farmers. as well as farmers using sustainable agriculture production methods. have long had problems getting credit and other forms of financing and insurance for their operations, in part because they are more likely to be small farmers. They do not always fit easily into the cate-

gories and boundries set up by the lenders, creditors and insurance agencies due to certain established rules and regulations in those industries (Small Farms Commission, 1999).

The second major challenge for the farmers was marketing their products. The problem, prevalent in the industry, is twofold. First, farmers of organic produce generally do not have easy access to market price and market information. and so do not know what prices to expect for their products. Next, farmers have difficulty finding distributors who could ensure proper handling of their products after they left the farm gate. Most handlers of organic and sustainable

products are not certified to handle them (handler certification is not required). In fact, with the market for organic and sustainable foods burgeoning beyond the traditional scope of retailers, more and more handlers who are primarily interested in mass market foods recently have begun carrying organic and other sustainably grown

Major Challenges for Organic and Sustainable Foods Farmers

- Lack of current standards and uncertainty about future standards
- Difficulty gaining new skills, training, financing, equipment and/or processes
- Difficulty finding distributors

foods. The larger number of distributors may make it more difficult for farmers to locate ones able to properly handle their products.

One-third of the organic farmers and fully one-half of the farmers using a mix of techniques thought that lack of government standards presented a third challenge to their success in the natural foods market. When considering uncertainty about future standards, 56 percent of the organic farmers and 60 percent of the farmers using a mix of techniques thought it was a significant barrier to success in the natural foods market. One-third of the organic farmers and 60 percent of the mixed technique farmers said they had developed their own natural foods labels in the absence of government standards for conveying production information to consumers.

With regard to publicizing their products, 14 percent of the organic farmers and 60 percent of the farmers using mixed techniques took advantage of relatively inexpensive advertising through newspaper ads and by direct mail. Before

attempting more sophisticated advertising. the farmers wanted to know whom they were trying to reach. Generally, when farmers such as those surveyed want to reach out to a target audience, they need to take on two main tasks. First, they most likely need to increase the scale of their natural food production. (Twelve of the 18 organic farmers and six of the 10 mixed-technique farmers surveyed said that they had increased the scale of their operations.) Second, farmers need to target the markets where their products can make the biggest impact. To do so, farmers must use "inward focused" or "outward focused" targeting. Inward focused targeting, a "gut instinct" method, has been the mainstay of organic and sustainable agricultural producers since the beginning of the natural foods movement.

C A S E S T U D Y

Flickerville Mountain Farm and Ground Hog Ranch

Flickerville Mountain Farm and Groundhog Ranch is a small. labor-intensive, highly diversified operation located in southcentral Pennsylvania. Owners Cass Peterson and Brian Cramer have been growing and marketing their products there since 1983. They have 65 acres. 14 of which are currently in cultivation. All of their products are grown using organic production methods. They use an Integrated Pest Management (IPM) program including beneficial insects and bio-controls.

As was mentioned before, Peterson and Cramer's operation is highly diversified. They carry a wide variety of vegetables and flowers, focusing on those that provide the most taste and are less well known than their more traditional supermarket counterparts. They specialize in tomatoes. growing about 50 different types, some of which are heirloom and/or open pollinated. They operate a greenhouse from April to June in order to expand further the number of products they can bring to market. They work to produce the highest quality premium products possible.

Peterson and Cramer handle the marketing of their products with their on-farm staff. They work to bring their products to consumers as directly as possible. They believe in trying to develop a more regional food system. In fact, they limit their area of sales to a radius of less than 200 miles. They attempt to avoid selling to wholesale and brokering operations entirely. selling to them only as a last resort when no more direct market can be found. The farm also operates a web site where its sales locations can be accessed and information about its growing and marketing practices can be found.

Most of their products are sold through farmers' markets and to restaurants in the urban Washington, DC, neighbor-hood of DuPont Circle. They limit the farmers' markets they attend by going only to those that are "producer only," meaning that no vendors are allowed - only farmers who have grown (an in some cases processed) everything that they are selling. The dozen or so upscale restaurants that they sell to include Nora, the first restaurant in America to be certified as organic. Flickerville also runs an on-farm sales site, but describes it as limited in comparison to their farmers' market and restaurant sales operations.

Flickerville Mountain Farm strives to maintain itself as a high quality. strictly regional food producer. Besides working to make their farm succeed on a daily basis, Cass Peterson and Brian Cramer also work toward a more local, less traditional food system off the farm. They have done this in part by volunteering on the Board of the Henry A. Wallace Institute for Alternative Agriculture Policy Studies Program Board.

Outward focused targeting involves quantitative methods of measurement and analysis. Twelve (67 percent) organic farmers and eight (80 percent) mixed-technique farmers said that they worked to target a market. The fact remains, however, that some kind of targeting is essential to success in the natural foods market. Due to a lack of marketing know-how, some organic and sustainable farmers have been forced to sell their value-added products as lower-priced conventionally grown mass market products.

Cooperation and contracting relationships were important to many of the farmers surveyed. About half of the organic farmers had concluded contracts with other businesses and 45 percent had joined a cooperative or limited partnership. One-third of the mixed-technique farmers had concluded contacts with other businesses and half had joined a cooperative or limited partnership.

Findings

The problems facing organic farmers are similar to those facing conventional farmers: where to market, how to get their products to the market and what kind of prices to ask for and receive. Some problems are, however, unique to organic farmers. Even though it has become much easier for farmers of organic food to find a market (as long as they remain open to a wide range of buyers to whom they will sell), problems with supply persist. Farmers are simply unable to produce enough to meet market demand, primarily because their operations are small. Even though the numbers of organic farms and acres farmed using organic techniques have increased rapidly, organic farms remain much smaller than their conventional counterparts. For example, in 1997, the average conventional wheat farm was 242 acres, while the average organic wheat farm was only 107 acres. The average conventional vegetable farm was 70 acres (USDA, 1998); the average organic farm was estimated to be less than 12 acres (OFRF, 1997). More than half of the organic farmers surveyed by OFRF planned to increase the number of acres they farmed organically.

Because the organic market is not as amply supplied as the market for conventionally produced agricultural commodities, some businesses suffer periodic shortages of special commodities. Organic manufacturers, as an example, may run out of potatoes and find themselves unable to sell frozen french fries in the summer. Further, large manufacturing firms may be tentative about entering the organic industry because they are aware that farmers may find it difficult to produce the large quantities needed to supply the industry. On the positive side, the very scarcity of supply means that organic farmers have greater bargaining power in the marketplace than conventional farmers. For the time being, at least, it seems that manufacturers, retailers and farmers in the natural foods market are on equal ground.

Organic and mixed sustainable agricultural farmers usually lack two things that make good marketing possible: financial means and knowledge of marketing institutions. They are accustomed to marketing to a relatively small group of people who have already converted to eating organic and other sustainably grown products. They understand that they have a much larger group to appeal to, but are unused to working with advertising consultants and firms. In many cases they do not have the money to do so, even if they wish to. Another financial problem is that farmers who want to increase their acreage farmed organically may not be able to afford to purchase more land. Even if they can, farmers will be unable to earn revenues from the land during the time required to convert it from conventional to organic use (assuming the land has not already been certified for organic production). Fortunately, the loss of revenue during this period may be not as severe as it was in the past, since transitional products having recently begun appearing in natural foods stores.

Looking Ahead

As we have seen, the structure and very nature of the organic foods industry are changing dramatically As consumer demand for organic foods skyrockets - a trend that seems likely to continue into the nest decade and possibly beyond - the range of firms that produces them has expanded dramatically. The organic market is no longer small and specialized, as it has traditionally been; it is becoming specialized but mainstream. Organic food is now sold in a wide variety of retail outlets: local health food stores. natural foods supermarkets and even mass marker supermarkets. Heightened awareness of the organic food industry is reflected in such governmental policy initiatives as the Organic Food Production Act and the creation of the National Organic Standards Board. Public and private research into organic farming and marketing has increased as well, although it has been limited due to lack of funding.

As the organic foods industry has grown, new and established firms have become ever more competitive. Large, national organic foods firms are adopting strategies used by mass market retailers. distributors and manufacturers to achieve success. Smaller. regional retailers, distributors and manufacturers have not used these strategies; rather, they rely on customer service and personal relationships to stay competitive. Among both groups, however, there has been significant uncertainty about whether all firms in the market can co-exist and prosper.

The uncertainty stems from a variety of concerns, among them a lack of basic data about the marker. Although there are more people buying organic products and more products to buy, there are not enough data available at this writing to assess how much growth is due to new consumers versus traditional consumers of organic products. Similarly, data shortages make it impossible to assess how many manufacturers are new to the organic foods industry, how many are expanding their product lines and. among the latter, how they are expanding their lines. Farmers' responses to Increased consumer demand are also difficult to gauge accurately without data on how many farmers are converting from conventional to organic farming methods. how

many farmers are increasing the number of acres they farm organically and how many began as organic farmers.

The current lack of uniform organic food standards is a key problem, Although the industry has been successful in creating certification systems. there are currently too many; what the industry needs is standardization, particularly in light of the fact that European buyers do not accept all of the U.S. certification systems (which effectively eliminates exports). In the long term, uniform standards will be essential for U.S. producers and manufacturers of organic foods who want to enter international markets.

Standardization had been difficult to establish in the U.S. In 1990. Congress passed the Organic Foods Production Act (OFPA). OFPA created the National Organic Program (NOP). which is administered by the Agricultural Marketing Service (AMS). The goal of the program is to create federal regulations that define standard organic farming practices and a National List of acceptable organic production inputs. The NOP has been working to draft national organic standards since 1990. It promulgated a proposed rule in mid-December 1997. The public comment period for this rule drew over 200,000 comments - more than any other rule promulgated by the USDA. The revised proposal could be published in the Federal Register in early 2000.

Whether or not the rule is established in 2000, it is clear that organic food will continue to be sold in mass market supermarkets, natural foods retail stores and smaller regional outlets, ail targeting different groups of consumers. Although large firms, be they producers, distributors, or retailers. have nearly eliminated small firms in conventional markets. we do not think that the organic food industry will follow suit. Instead. We believe that the future organic foods market may become highly specialized. Smaller regional outlets will likely target the consumer who buys organic food for philosophical reasons; mass market supermarkets will likely target new consumers of organic foods who are more concerned about health issues. Conventional stores may be more likely to carry organic products manufactured by conventional firms that have only recently entered the organic and natural foods industry. These firms are more likely to be the ones with which they are familiar, and which have not traditionally operated with a particular deference to the social and environmental aspects of organic farming.

However organic food is marketed in the future, a continuing concern will be to distribute a consistent supply of commodities along the marketing chain. Anecdotal information in trade literature, survey results and case studies provides documentation of small natural foods retailers that cannot provide enough commodities, at prevailing market prices, to meet market demand. However, there is no hard evidence on out-of-stocks or other supply problems. Some question whether retail prices are failing to respond quickly enough to equalize supply and demand, or whether prices farmers receive are failing to rise enough to provide incentives for increased production. Others believe that an immature distribution system is the problem. In any case, manufacturers seem to be responding by entering creative contracting arrangements with farmers (Cascadian Farm) to secure their needed supplies. We identify this as a possible area for public policy intervention.

Another place where public policy intervention may be appropriate and useful is in the provision and collection of information. Researchers and industry members would benefit from information about the number of organic

farmers, how much land they farm, the crops they grow. farm level prices, sales, and retail prices. Information on marketing and production contracts for different commodities would also aid farmers when making decisions, and would guide researchers and policy makers in their work. Much of this information is available for conventionally grown food products, and having this information for organic products would aid producers, manufacturers, distributors, and retailers in their decision-making.

We believe that new and established firms in the organic foods industry can coexist and prosper. In fact, according to some of our case studies, the presence of both may aid in market growth. But two critical challenges remain as the market develops. The first is defining a uniform standard for organic foods and ensuring that products labeled "organic" satisfy the criteria for organic food. The other major challenge will be identifying why out-of-stock problems persist at the retail level and taking appropriate measures to correct them. If these challenges are addressed in a timely fashion - with the benefit of detailed research - the future of the organic foods industry looks bright indeed.

Emerging Trends in the Natural Foods Industry Survey Methodology and Sample Origins

A) Survey methodology and Sample Origins

The Henry A. Wallace Institute for Alternative Agriculture completed the survey used in this report in May 1998. Entitled "Emerging Trends in the Natural Foods Industry the survey was administered by telephone to market managers of 290 food industry businesses by Westat, Inc.. of Rockville, Maryland. The names of the responding firms and their responses are confidential.

The businesses analyzed in this report fall into four categories:

CATEGORY	NUMBER OF RESPONDENTS
Natural agricultural producers	35
Natural foods manufacturers/processors	43
Natural foods distributors/brokers/wholesalers	37
Natural foods retailers	33

The survey sample origins were as follows:

Natural agricultural producers randomly sampled by Nessa Richman from lists provided by 27 state and regional sustainable and organic agricultural producer organizations

Natural foods manufacturers/processors randomly sampled by Nessa Richman from the Whole Foods Source Book

Natural foods distributors/brokers/wholesalers randomly. sampled by Nessa Richman from the Whole Foods Source Book

Natural foods retailers random sample purchased from Venture Direct Worldwide, a list management service

- B) The survey questions are reported in Appendix B
- C) The authors of this report performed an additional level of data analysis by phoning all natural agricultural producers and manufacturers/processors surveyed to ascertain whether they produced or distributed strictly organic products. both organic and natural non-organic (called mixed), or all natural nonorganic. The following table reveals the number of firms in each category.

PRODU	JCERS	M A	ANUFACTURI	ERS
Organic	Mixed	Organic	Mixed	Natural
18	10	8	I1	13

D) The survey is not stratified. and so the results are not representative of the population being studied. As a result, the survey results should be interpreted cautiously. The results can give insight, but not definitive statements, into issues that the survey group feels are important in producing and marketing organic food products.

1998 Survey of Emerging Trends in the Natural Foods Industry

Wallace Institute Marketing Project 1998 Survey of Emerging Trends in the Natural Foods Industry

Please answer all questions in every section by checking a box $(\underline{\square})$, circling a number $(\underline{1})$, or "writing in" your response.

As you provide your answers, please use the following definitions:

- 1. The term "natural foods" refers to foods which do not contain synthetic or artificial ingredients and are not more than minimally processed, and foods which are produced organically or with other sustainable farming methods.
- 2. The term "supplier" means the businesses/individuals from whom you purchase your inputs.
- 3. The term "consumer" means the business/individuals to whom you sell your products.
- 4. The term "barriers" refers to impediments to market entry and market success.

Please know that all responses will be kept strictly confidential. Your answers will be used only for statistical tabulation purposes in combination with all other replies.

Your response should be returned in the attached business reply envelope no later than April 10, 1998.

If you want to receive a summary of our survey findings, please provide your name and address here:

oitvu		Ctata	7in.
Stree	et address:		
Your	organization's name:		
Your	name:		

Part I. General Information

Agricultural Pi	roducer		🗖	Retail supe	ermarket			
Food manufa	acturer/pro	cessor			ecify			
Food distribu	itor/brokcr/w	holesaler						
In which st	ate(s) do y	ou sell your	product(s)?					
T 1: 1 1 G.				National (a	all states)			
Individual Sta		**					-	
AL AK		IL IN		MT				
AK AZ		IN IA		NE				
AR		KS		NV NH				
CA		KY		NH NJ				
CO		LA		NM				
CT		ME		NY				
DE		MD		NC				
DC		MA		ND				
FL		MI		OH				
GA		MN		OK				
HI		MS		OR				
ID		MO		PA		***	<u>-</u>	
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Yes		No		Don't know?				
Yes		No		Don't know?				
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What percer (SUPERMAR Grain production Fruits Vegetables Dairy Meat, poultry, fit Legumes and in Fats and oils Sweets (including Alcoholic bever Other (Specify)	untries are ma	No	your products?	n the following	g categorie	s?	%%%%%%%%	s" refers to foods

ь.	now long has your company been involved in the natural loods market?
	Number of years ☐ Less than 1 year ☐ Don't know ☐
7.	Do you have any personnel SOLELY dedicated to natural foods activity In your firm?
	Yes Don't know
	If yes, how many people in your company are dedicated to natural foods? Number:
8.	Please list the top three selling natural foods marketed by your company:
	1
	2.
	3
9.	Efficient Consumer Response (ECR), as you may know, enables food retailers, distributors, manufacturers and producers to be linked together electronically and cooperate closely in order to improve the efficiency of the food delivery system.
	Are you working with your suppliers and/or buyers to implement any of the following ECR techniques?
	9.1 Category Management: Merchandising of product groupings based on actual consumer purchasing patterns?
	Yes
	If yes, are natural foods included in your category management initiatives?
	Yes
	9.2 Electronic Data Interchange (EDI): Transfer of data between trading partners in a standardized, paperless environment?
	Yes
	If yes, are natural foods included in your EDI initiatives?
	Yes
	9.3 Activity-based Costing: Distribution of costs to specific activities performed in divisions of an organization?
	Yes
	If yes, are natural foods included in your ABC initiatives?
	Yes
	9.4 Continuous replenishment: System of electronic custom inventory replenishment using EDI standard formulas?
	Yes
	Are natural foods included in your continuous replenishment initiatives
	Yes

Part 2. Barriers in the Natural Foods Market

The following items examine your perceptions about barriers in the natural foods market. Remember, the term "barriers" refers to impediments to market entry and market success. Please circle a number between 1 and 6 for each of the following items to indicate whether you feel a barrier exists in the market. If you have "No Opinion." circle 9.

1.1	POTENTIAI. FIRM LEVEL BARRIERS						
	a. Strategically Planning Natural Food Ventures						
	 Finding timely, complete market price and quantity information	2	3	4	5 5	6	9
	b. Launching Natural Food Ventures						
	 I.inking with natural food input suppliers	2	3	4	5 5	6	9
	c. Managing Natural Food Ventures						
	 Maintaining quality and safety standards	2 2	3	4	5 5	6	9
	management methods1 Packaging natural food products	2 2	3 3	4	5 5	6 6	9
	d. Selling Natural Food Products	-	v	·		·	·
	 Linking with buyers' interest in evironment, health, and safety	2 2	3 3	4 4	5 5	6 6	9 9
1.2	POTENTIAL INDUSTRY LEVEL BARRIERS						
	a Market Issues						
	Difficulty finding agricultural producers1	2	3	4	5	6	9
	Difficulty finding manufacturers1	2	3	4	5	6	9
	Difficulty finding distributors	2	3	4	5	6	9
	Difficulty finding retailers	2	3	4	5	6	9
	Market demand insufficient	2	3	4	5	6	9
	• blanket supply insufficient	2	3	4	5	6	9
	Unreliable market quality	2	3	4	5	6	9
	b. Policy issues						
	 Lack of government standards for natural foods 	2	3	4	5	6	9
	 Lack of industry standards for natural foods	2	3	4	5	6	9
	foods 1	2	3	4	5	6	9

2. Please describe any other MAJOR barriers you perceive in the natural foods market:

Part 3. Business Strategy

have "No Opinion," circle 9.	the foll	owing 6-	-point	scale	by c	ircling	the	appro	priate nu	ımber. If y
Developed a natural foods label	П	□→	1	2	3	4	5	6	9	
Distributed newgronen/direct mail advertising		\Box	1	2	3	4	5	6	9	
 Distributed newspaper/direct mail advertising Provided in-store advertising/demonstrations/samples 		\Box	1	2	3	4	5	6	9	
Sold a unique product		$\Box \rightarrow$	1	2	3	4	5	6	9	
Sold a high-quality product		$\Box \rightarrow$	1	2	3	4	5	6	9	
Diversified natural foods offerings		\Box	1	2	3	4	5	6	9	
Targeted a specific market		\Box	1	2	3	4	5	6	9	
Contracted with sellers/buyers		\Box	1	2	3	4	5	6	9	
• joined a cooperative/limited partnership		\Box	1	2	3	4	5	6	9	
Hired special staff for natural foods		$\Box \rightarrow$	1	2	3	4	5	6	9	
Increased scale of natural foods operation		$\Box \rightarrow$	1	2	3	4	5	6	9	
Other strategies (Please specify)		□→	1	9	9	4	r	c	0	
1	_	□→	1	2	3	4	5	6	9	
2	_	□→	1	2	3	4	5	6	9	
3	. •	4 7	1	2	3	4	5	6	9	
Please indicate which of the following resources in natural foods-related business. If you have used a cling the appropriate number. If you have "No Op	a sourc	ce, pleas	e rate		-	-				
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